LITERATURE OF MANUFACTURERS

Catalogues, bulletins and other direct advertising material recently issued.

Manufacturers are requested to send copies of new trade literature promptly to Electric Refrigeration News.

Allen-Bradley

Allen-Bradley Co., 498 Clinton St., Milwaukee, Wis., has issued a folder describing new automatic controls for use with motors and switches. An overload breaker to protect small A. C. and D. C. motors on refrigerating machines, and a contactor for A. C. and D. C. switching for use with refrigerators, are illustrated in the folder.

Bohn

Bohn all-porcelain base cabinet models, having a range of from 5 to 12 cu. ft. storage capacity, and a group of refrigerators for remote installation, ranging from 4½ to 46 cu. ft., are illustrated in catalog No. 28-2, issued by Bohn Refrigerator Co., St. Paul, Minn. The base cabinet models have a compartment for storage or compressor beneath the food chambers.

Frigicar

A four-page folder from the North American Car Corporation, 327 South La Salle St., Chicago, Ill., announces the development of a mechanical transit refrigeration system called the Frigicar. Further details are given elsewhere in this issue.

General Electric

Six domestic refrigerator models are displayed in a folder distributed by Refrigeration Division of General Electric Co., Cleveland, Ohio. The models represented, G-55, G-75, G-100, G-135 and G-175, provide food storage capacities for 2, 3, 4, 5 and 7 or more persons, respectively. G-40, another model displayed in the folder, has a food storage capacity of 3½ cu. ft., and is for apartment house use.

Handy & Harman

Twelve "Handy" silver solder formulas, arranged in order of silver content, appear in a catalog published by Handy & Harman, 57 William St., New York, N. Y. The formulas designate the percentage of silver that should be used in soldering of metals such as copper, iron, steel, brass and nickel.

Holcomb & Hoke

A booklet and a folder, issued by Holcomb & Hoke Mfg. Co., Indianapolis, Ind., describes and illustrates "All-Cold" display and top freezer counters. The top counters, having a uniform height of 50 in., range in length from 7 to 14 ft. The All-Display counters are made in 9 and 12 ft. lengths, having a height of 42 in.

Jewett

Refrigerators, lined with solid porcelain, 1¼ inches thick, and exteriors of porcelain enamel on Armco Iron, with chromium-plated hardware and trim of satin finish Monel Metal, are displayed in two catalogs issued by Jewett Refrigerator Co., Buffalo, N. Y.

Koch

Koch Butchers' Supply Co., North Kansas City, Mo., recently issued catalog No. 130, which illustrates and describes Koch standard display cases, cooling chests, commercial-short order-kitchen and florist refrigerators, and walk-in coolers. The display counters have fronts made of three thicknesses, ¼-in. plate glass. Corkboard, sheated in waterproof case, insulates the counters.

Schmidt

Thesco display cases and refrigerators are shown and described in catalog No. 94, issued by C. Schmidt Co., manufacturers of Thesco refrigerators and store fixtures, corner John and Livingston Sts., Cincinnati, Ohio.

Trumbull

Catalog 14, issued by Trumbull Electric Mfg. Co., Plainville, Conn., lists a complete line of electrical products, including enclosed switches, open knife switches, panel boards, and switchboards and porcelain wiring devices.

Union Fibre

Lith insulation board, for temperature service, is described in a booklet published by Union Fibre Co., Inc., Winona, Minn. Linefelt, a quilted insulation, Fibrofelt, a flexible insulating board, and a fireproof mineral wool are also described in the booklet.

U. S. BULLETIN SHOWS HOW TO FREEZE ICE CREAM WITHOUT STIRRING

Washington, D. C.—Satisfactory desserts may be frozen without stirring by packing in ice and salt or by placing in trays of mechanical refrigerators, according to leaflet 49, published by U. S. Department of Agriculture. The leaflet also says that a fairly rich mixture must be used in these desserts and the ingredients carefully combined in order to obtain a satisfactory texture.

The title of the leaflet is, "Ice Creams Frozen Without Stirring." It was written by Dr. Louise Stanley, chief, and Jessie Alice Cline, assistant specialist in home economics, Bureau of Home Economics.

DEHYDRATED TUBING FOR QUICK USE

Made to A. S. T. M. Specifications (B 68-27T)

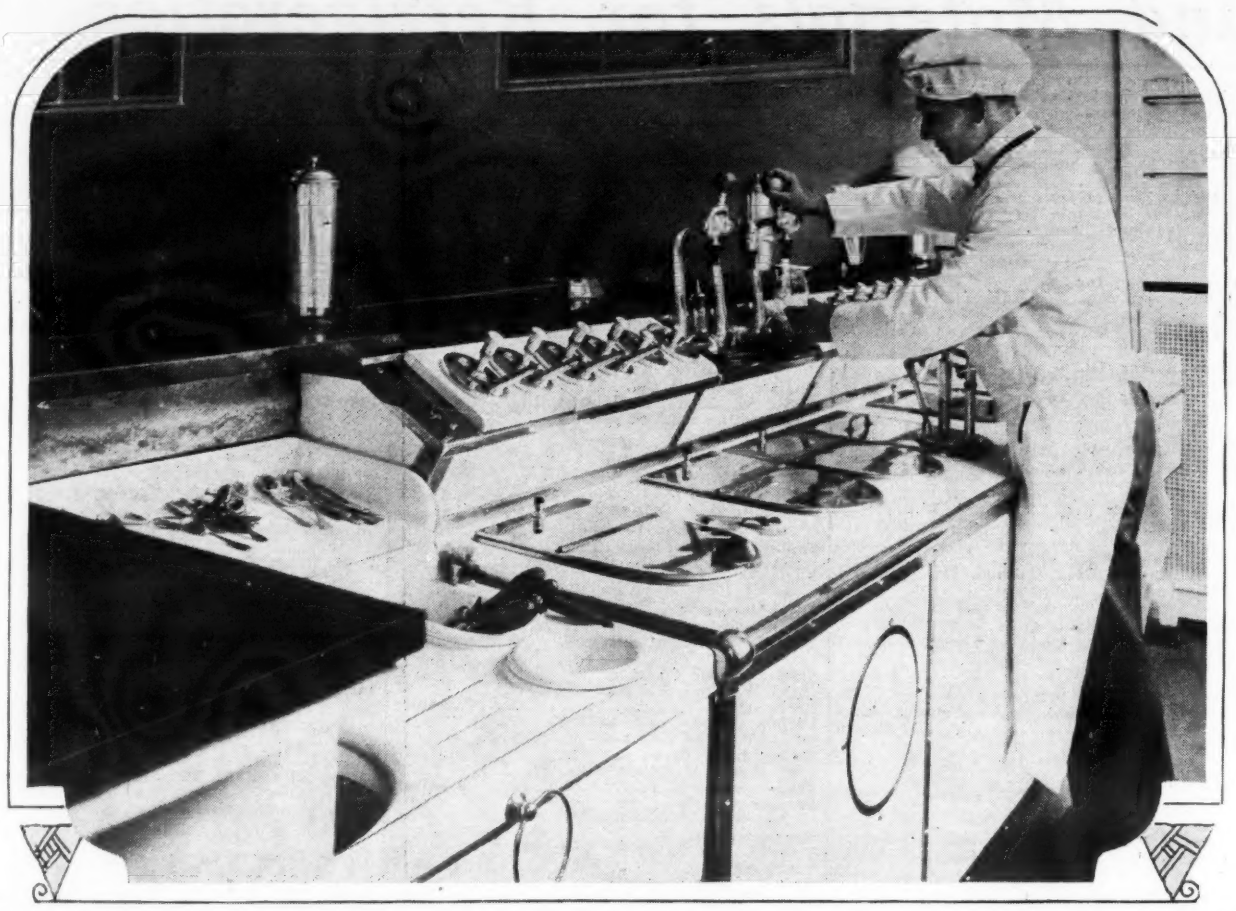
Shipped Rush from Stock

WOLVERINE TUBE CO.

SEAMLESS COPPER BRASS & ALUMINUM

1431 Central Ave. Detroit, Mich.

New Competition for Beer in Germany



WILL Germany ever abandon beer for butterfat? Can the breweries keep American soda fountains out of Berlin?

If you have an authoritative answer to either of these questions, you'll be welcomed as a source of information by the German secret service.

Berlin is just now, for the first time, meeting the sugary temptation of chocolate nut sundaes! A real American soda fountain has opened in the Kurfurstendamm—popular cafe and movie center, and one of the sights of the town is a 270-pound Prussian atop a swaying stool, awed with the mouth-watering contemplation of swirls of whipped cream and dots of red cherry! The soda jerker in Germany draws more admiration and attention than an aviation ace. In fact, one entire section of the new electrically equipped fountain is placed in the front window of the store so that the curious on the curb can follow his every movement in dipping syrup and scooping ice cream.

ICE INDUSTRY ISSUES NEW BOOKLET FOR HOUSEWIFE

"Home Refrigeration of Fresh Vegetables" is the title of a booklet by Miss M. E. Pennington, 51 Chambers St., New York, N. Y., director of Household Refrigeration Bureau of the National Association of Ice Industries.

The booklet, stressing increased use of vegetables in the home, states that dietitians recommend a minimum of two vegetables, other than potatoes, be eaten every day. The vegetables should preferably be eaten raw, as many mineral constituents, such as calcium, phosphorus, iron and salts, are lost when the vegetables are cooked, unless all the water in which they have been boiled is utilized.

The author continues by saying that vegetables such as asparagus, cabbage, carrots, celery, cucumbers, cauliflower, corn, lettuce, spinach, tomatoes, radishes and parsley can be kept in a good raw condition with proper refrigeration; thus they will contain the maximum food value when prepared for consumption.

Other booklets of the Household Refrigeration Bureau are: Food Wholesomeness, Food Economy, Food Quality, Ice Cream Making and Appliances in the Home, Where to Place Food in the Household Refrigerator, The Care of the Home Refrigerator, The Care of the Child's Food in the Home, Why We Refrigerate Foods, The Romance of Ice, Cold is the Absence of Heat, Journeys with Refrigerated Foods, Eggs and How to Use a Good Refrigerator.

TO MANUFACTURERS OF ELECTRIC AND GAS UNITS

If you want CABINETS as you want them let PUFFER-HUBBARD build them. We work to specification.

Puffer-Hubbard Mfg. Co.
MINNEAPOLIS, MINN.

MANUFACTURERS OF

Sheet Metal Parts

To Your Specifications

Bases, Angle Iron to support units.
Guards—to enclose units.
For Household Refrigerators we make outside steel panels, food compartments, etc.
Ice Cream cabinets and parts.

MOTORS METAL MFG. CO.
5936 Milford St. - Detroit, Mich.

NOW SENT FREE

INCREASE YOUR SHARE OF REFRIGERATION DOLLARS

Amazing new easy method trains you in all the moneymaking principles of Electric Refrigeration, at home in spare time. No textbooks, no study grind. Complete, practical. Diploma given. Praised by Kelvinator, Servel, Copeland, General Electric, Zerozone, etc. Hundreds of satisfied students. Get new book of facts FREE! No obligation, so ACT NOW to train this winter. Utilities Engineering Institute, Dept. 9119, 4403 Sheridan Rd., Chicago, Ill.

Mechanical Engineering Instructors

Mechanical Research Engineers

Prominent and progressive manufacturer of domestic electric appliances in Ohio would like to add to its laboratory staff a Mechanical Engineer of the following qualifications: Mechanical Engineer. Preferably 1923 to 1926 graduate, age 23-28, married. Three to six years commercial laboratory or teaching experience would be admirable qualifications for this position. Advanced engineering degrees preferable but not essential. Applicant must be of analytical type of mind and naturally inclined toward research and development of domestic appliances, such as refrigerators, washing machines, vacuum cleaners, ironers, etc. Moderate starting salary but excellent future and permanent position is available for competent applicant. Box 213.

THE CONDENSER

ADVERTISING RATE fifty cents per line (this column only).

SPECIAL RATE if paid in advance — Positions Wanted — fifty words or less, one insertion $2.00, additional words four cents each. Three insertions $5.00, additional words ten cents each. All other classifications—fifty words or less, one insertion $3.00, additional words six cents each. Three insertions $8.00, additional words sixteen cents each.

POSITIONS AVAILABLE

REFRIGERATION ENGINEER—Must be technical graduate, experienced with non-ammonia refrigerants and competent to conduct volumetric efficiency, calorimeter, motor load and other tests. State experience and salary required. Also if prefer permanent or temporary consultant position. All information confidential. Box 207.

SALES MANAGER—In wealthy suburban New York territory to build up distributor sales force. Man qualifying will be given unlimited power and paid on basis of his accomplishment. Only man willing to work on commission basis will be accepted. Write full information of yourself, giving sales record, experience, reference, etc. Box 199.

Kelvinator service man for domestic and commercial installation and service work. Address fully with names of former employers and nature of work done. Kelvinator Co., 50 W. Flagler St., Miami, Fla.

Salesman wanted to sell full line of cooling rooms, refrigerators and white porcelain freezer cases for electric refrigeration. Write or wire for territory. Gaus Manufacturing Co., Inc., Main and Clinton Sts., St. Louis, Mo.

POSITIONS WANTED

CHIEF ENGINEER AVAILABLE—Ten years' experience in electric refrigeration with leading manufacturers in charge of engineering design and production methods. Wishes to communicate with manufacturer east of St. Louis. Box No. 180.

Chief Engineer, with ten years' electric refrigeration design, development and production experience, wishes to get in touch with a manufacturer. Box 203.

MISCELLANEOUS

ENGINEERING: Domestic and small commercial compressors and refrigerating equipment designing service. Developers of your ideas with strict protection to you. Years of successful record. All correspondence strictly confidential. Address, Box 204.

FOR SALE—25 S-7 Servel refrigerators complete, in original crates. Retiring from business. Will accept reasonable offer. Box No. 212.

FOR SALE—State or entire U. S. rights for improved and proven ammonia pre-cooler for ice, ice cream, fruit pre-cooling and dairy plants. Sells for $250 to $375—marvelous results. Arrange for several states—manufacture on large scale. Blue prints, descriptive matter. Refrigeration Improved Appliance Co., Winter Haven, Fla.

We have 50 complete Iroquois electric refrigerating machines, factory tested and packed at $45.00. Write for descriptive booklet. H. LIPPMAN & BRO., 101 Walker St., New York City.

OPPORTUNITY

for DISTRIBUTORS, DEALERS *and* SMALL MANUFACTURERS

who are assembling and selling commercial and domestic refrigeration apparatus

UNDER PRIVATE NAMES

Manufacturer can offer compressor units and evaporators (SO_2) at very attractive prices in sizes 75 to 1100 pounds ice melting capacities.

Immediate Delivery. Wire or write for literature and specifications and prices.

Address Box 206

Subscription Order

ELECTRIC REFRIGERATION NEWS
550 MACCABEES BUILDING, DETROIT, MICH.

Please enter subscription to Electric Refrigeration News.

United States and Possessions:
☐ $2.00 per year. ☐ Three years for $5.00

All other Countries:
☐ $2.25 per year. ☐ Two years for $4.00

I am enclosing payment in the form of
☐ Check ☐ P. O. Order ☐ Cash

Name.....

Street Address.....

City and State.....

Remarks:.....

ELECTRIC REFRIGERATION NEWS

The business newspaper of the refrigeration industry

VOL. 4, NO. 7, SERIAL NO. 83 | Copyright, 1929, by Business News Pub. Co. | DETROIT, MICHIGAN, DECEMBER 4, 1929 | Entered as 2nd class matter August 1. 1927, at Detroit, Michigan. | PRICE FIFTEEN CENTS

COPELAND MOVES TO NEW PLANT AT MT. CLEMENS, MICH.

Production Resumed After Two Weeks Shutdown

Mt. Clemens, Mich.—Maximum service to distributing outlets, greater operating economies and facilities for expansion, are some of the important considerations that prompted the removal of Copeland Products, Inc., to the plant in Mt. Clemens, acquired from the National Candy Company.

The old plant on 630 Lycaste Ave., Detroit, had been occupied by Copeland since 1925 during the period of its most rapid growth. Production during the current year taxed the old plant to the limit of its capacity, and was severely hampered by the inadequacies of space Reduced costs, increased efficiency and larger volume is made possible by the ideal conditions in the new plant.

The new plant is of the modern monitor type, single floor structure, well lighted, and providing 50 per cent more floor space than that available in the old plant. It is served by railroad sidings, with receiving and shipping platforms extending along the entire length of the plant. Processing is so arranged that materials move through the required operations without interruption or unnecessary handling. All elements entering into manufacturing, inspection, material handling and material control are developed in a manner to insure maintenance of quality, speedy production and low cost. The layout of the plant and the large unoccupied acreage adjoining it will permit great expansion of Copeland operations without interruption to existing activities and at minimum cost.

The new plant, erected five years ago, is located on Cass Ave., on of the principal streets of Mt. Clemens, less than a mile from the city's business center, and adjoins the main line of the Grand Trunk railroad. It is L-shaped, 400 feet long and 250 feet wide. The offices occupy the entire front section. A hall running through the length of the office quarters divides them in half. On either side are the offices, separated from each other by transparent glass partitions Office space for several officials and the accounting department are in the right wing of the office building, as one enters the lobby, the latter spacious enough to permit display of an extensive line of Copeland products and with ample room for all visitors. The general offices are to the left of the main entrance.

The factory proper is 360 feet long

(Concluded on Page 15, Column 1)

A.S.R.E. MEMBERS GATHER FOR 25th ANNIVERSARY SESSION AT NEW YORK

New York, N. Y.—The annual convention of the American Society of Refrigerating Engineers (headquarters at 37 W. 39th St., New York City) opens December 4 at the Hotel Pennsylvania. Registration of delegates will occupy the forenoon, and at 12:30 p. m. authors and speakers will be honored at a luncheon at which Colonel R. I. Rees will speak on "The Young Engineer in Industry."

The first technical session will open with an address by S. C. Bloom, covering "The Next Ten Years in Refrigeration." Two papers are to be presented at this session, one by Clarence Birdseye on "Containers for Frozen Foods," and the other by E. F. Mueller on "Refrigeration Research." At the Open Forum, the delegates will discuss "What Type of Knowledge is Most Needed in the Profession, and How is it to be Encouraged?"

Celebration of the twenty-fifth anniversary of the Society will take place at the banquet on Friday evening. At this session, the principal one of the convention, Frederick G. Keyes and Georges Claude will be inducted into honorary membership in the Society.

SOCIAL EVENT PLANNED FOR DETROIT ENGINEERS

Detroit, Mich.—Detroit Section of American Society of Refrigerating Engineers will hold its annual meeting and cabaret party at the Kelvinator plant, 14250 Plymouth Road, Monday, Dec. 9. After a short business session the remainder of the evening will be given over to entertainment.

No Exhibits at San Francisco

New York, N. Y.—E. W. Goldschmidt, chairman of the Exhibition Committee, National Electric Light Association, announces that there will be no exhibition in conjunction with the annual N. E. L. A. convention, which will be held at San Francisco, Calif., the week beginning June 16, 1930.

Suitable facilities for housing the large display of electrical industry products are not available, the Civic Auditorium being ample enough for the convention itself but lacks additional space for exhibits. Erection of a temporary building near the Auditorium was contemplated by the Exhibition Committee, but later was found inadvisable due to the unwarranted costs.

DIRECTORY NUMBER

PREPARATIONS are being made for the publication of a comprehensive listing of all manufacturers of refrigerating systems, cabinets, parts, accessories, materials, and related merchandise, also production and service tools and equipment, in the Annual Catalog and Directory Number of the News, January 1, 1930.

The December 18 issue will contain a special advance listing of refrigerating machine manufacturers, giving specifications of the units. Equipment and tools for production and service will also be featured in this issue.

Manufacturers who have not furnished data in reply to questionnaires distributed by the News are requested to notify the Editorial Department at once.

DEALER'S FRANCHISE IS MAJOR TOPIC AT SERVEL CONVENTION

Increased Profits For Dealers, Few Changes in Line

Evansville, Ind.—Opening the Servel electric refrigeration sales meeting on November 21, H. W. Foulds, vice-president of distribution, emphasized the fact that Servel's endeavor in 1930 will be to establish better franchises for its distributing organization. Mr. Foulds said, in part:

"As the 1929 season closes we find refrigeration no longer an infant industry. Its policies and practices are becoming standardized and prominent. There is a sound prosperity particularly among the leading manufacturers. Until recently new models or new devices were too frequent because of the necessity occasioned by the new industry, but today the experience of the past few years has enabled the production of equipment accepted as highly satisfactory and efficient. Inasmuch as the refrigerator serves the user over a period of years, changes for the sake of new models have no real value. A refrigerator tested under actual usage, with a season of success, is a better piece of sales material than is the annual model such as we have in the automobile industry.

"The backbone of the Servel line during 1930 will be the 'K' model (introduced at the beginning of 1929 and found so satisfactory) with the usual improvements developed from time to time. A new 4-foot model has been

(Concluded on Page 4, Column 1)

Chicago Meeting Postponed

Chicago, Ill.—At the request of the Refrigeration Division of the National Electrical Manufacturers Association, which will meet at Detroit, December 9, R. Bourke Corcoran, chairman of the Refrigeration Advisory Committee, has issued announcements postponing a meeting of refrigeration manufacturers scheduled for the same date in Chicago.

CONFIDENCE EXPRESSED AT UNIVERSAL COOLER STOCKHOLDERS MEETING

Detroit, Mich.—At the annual stockholders' meeting of the Universal Cooler Corp., held at the office of the company on November 27, manifestation of the confidence of the stockholders was evident in their attitude and general discussion.

G. M. Johnston, president and general manager, assured the stockholders that the same conservative and sound policies which have meant much to the success of the company in the past, will still be continued in the future.

J. W. Taylor, assistant general manager, was elected vice-president and director. John Huetteman, manager of the Kraft Cheese Co. and director of the Detroit Refrigerating Co., was added to the directorate, and the following members of the Board were held over: G. M. Johnston, president; Ford Ballantyne, vice-president; A. H. Meinke, secretary-treasurer; A. H. Sarver, C. G. Dunham, J. B. Ford, Jr., E. B. Henry and Charles H. Hodges.

WILLIAMS ATTACKS ESSINGTON'S REPLY TO KEGEL EVIDENCE

Charges Brief Is Misleading and Unauthorized

Chicago, Ill.—Charges by E. T. Williams, consulting engineer of Servel, Inc., that misleading and unauthorized statements appear in the brief filed by Senator Thurlow G. Essington, counsel for the Special Industry Committee, in reply to the "Summary of Evidence and Argument, Concerning Proposed Refrigeration Ordinances" submitted to the Chicago Health Committee by Dr. Arnold H. Kegel, commissioner of health, are the latest development in the controversy over the adoption of a refrigeration code by the city of Chicago.

Mr. Williams, a pioneer in the electric refrigeration industry and an active participant in many national and local meetings at which safety codes have been under consideration, is well known throughout the industry as an exponent of ultra-safety measures. During the numerous hearings held by the Health Committee of the Chicago City Council since the early part of last summer, he frequently drew the fire of other members of the Special Industry Committee by openly supporting Health Commissioner Kegel in the latter's demands for certain safety measures which were strenuously opposed by leading manufacturers of the multiple, or apartment-house type, of refrigeration system. While other engineers insisted that Dr. Kegel's "yardstick of safety" was impracticable, Mr. Williams agreed that such systems could be so designed and installed as to comply with the Health Department requirements. To prove his point he set up a system at the Chicago Avenue Pumping Station, which was demonstrated to the Chicago officials recently. A photograph of the equipment taken during the test, and a diagram of the connections, appeared in the November 20 issue of ELECTRIC REFRIGERATION NEWS (page 19).

Taking particular exception to references, in the brief by Senator Essington, to the demonstration of this system, Mr. Williams addressed a letter to the Chicago attorney on November 19 in which he said:

> "Your whole statement regarding the demonstration made at the Chicago pumping station seems distorted for the purpose of discrediting an earnest effort to provide safety in these otherwise dangerous systems, and to eliminate the menace to the life and health of women and children in their homes."

In the brief which Senator Essington submitted November 18 on behalf of "The Committee of Manufacturers selected at a meeting of the Manufacturers

(Concluded on Page 14, Column 2)

Refreshments on San Francisco Bay

PASSENGERS on Southern Pacific Co. ferry boats are now enjoying ice cream and cold beverages served at the refreshment stands located in the main cabins. This company has installed Frigidaire equipment in the cafes, pantries and refreshment stands on a number of its ferry boats. Fruits, vegetables and other foods are displayed in refrigerated cases in the cafes.

Servel President Forsees Prosperity

BECAUSE "the farmers are calmly shucking corn and oil wells are still spouting liquid gold," Colonel Frank E. Smith, president of Servel, Inc., has full confidence that the troublous times in Wall Street will have little effect on refrigeration business.

This sentiment was expressed in a telegram from Colonel Smith to the Servel Sales Conference in Evansville, on November 21st. The message follows:

"We have recently had troublous times in Wall Street, and expensive New York apartments and strings of polo ponies are for sale, while sumptuous ladies in reminiscent sables and diamonds are experiencing great difficulties on Broadway. But out in Iowa and Indiana, the farmers are calmly shucking corn, while the oil wells of Oklahoma are still spouting liquid gold, fat oranges are thick in California, and mail order houses continue to increase their sales.

"Real business is as solid as the Rock of Gibraltar because it rests on the practical needs and the genuine demand of the great prosperous American people to whom Wall Street means no more than Main Street, and the majority of whom think that the market is a place to buy fresh vegetables.

"From the standpoint of any sincere business with sound set-up, this is a moment of real opportunity, for many rich markets heretofore invulnerable are now for the first time wide open.

"Nineteen thirty will be a year of more sweat and less swank; more trust in sound investments and fewer so-called investment trusts; more faith, more charity and more confidence. Everyone has gone back to work, and six months from now those who have worked the hardest will be on top and reap the rewards. The backbone of business is confidence, and with unified action and aggressive team play, there is no limit to what you can accomplish. Have the same confidence in your company, its product, and its policy, that the management has in your ability to succeed and you will come through with flying colors. May the year 1930 bring you health, happiness and business success."

KELVINATOR FINANCIAL STATEMENT SHOWS PROFIT OVER A MILLION DOLLARS

Detroit, Mich.—Kelvinator Corporation will report for its fiscal year ending September 30, 1929, a profit of $1,221,383.73 for the year, after all charges, compared with a loss for the previous year of $999,821.16. The company's statement will show current assets of $7,161,701.93, against current liabilities of $1,165,991.82, a ratio of better than six to one, as compared with current assets of $5,372,-120.84 and current liabilities of $1,407,-251.36 on September 30, 1928, indicating an improvement in the current position of $2,030,840.63. The company also during the year purchased and retired $170,000.00 of its 6 per cent gold notes, and closed the year with no bank loans. Preliminary balance sheet figures as of September 30, released at this time, show:

(Concluded on Page 8, Column 3)

REFRIGERATORS SOLD ON CONDITIONAL BILLS CAN BE RECORDED IN COURT

Boston, Mass.—A decision of importance to stores and other dealers selling refrigerators and other personal property on conditional bills of sale or the installment plan has just been handed down by Judge Carroll of the Supreme Judicial Court of this state. He directed William T. A. Fitzgerald, of the Suffolk Registry of Deeds, to accept and record conditional sales of electric refrigerators for a large apartment house on Columbia Road, Dorchester, bought on deferred payments by the builder. Under this decision a precedent is established by which similar conditional bills of sale, not only for automatic refrigerators, but for other similar property, such as built-in cooking cabinets, gas ranges, etc., can be recorded, and, as in the case above cited, a lien is created which will be good against the real estate. Judge Carroll, in his decision, said:

"The articles in question are not heating apparatus, plumbing goods, or ranges, but in my opinion they are of like nature. The apparatus to be installed does not differ in its nature and character from the apparatus specifically mentioned in the statute, although it serves a different purpose.

"As I consider the statute, it has no application to the bricks, mortar, lumber, steel and cement that goes into the construction of a building, nor to such articles as doors and windows, which lose their individuality when incorporated into a building. But it does apply to a cooling apparatus like the one in question, especially when the way and manner of its annexation is considered."

INSTALLS KELVINATORS AT PURDUE UNIVERSITY

Lafayette, Ind.—Northern Indiana Public Service Co. has made a large installation of Kelvinator equipment at Purdue University, according to William C. Stephenson, Kelvinator special representative, who was at that point recently. He reports installations in the dairy department, President Elliot's home, Union Building cafeteria and clubhouse, soda fountain, poultry department laboratory, experimental department, the Cary Memorial Hall, men's dormitory. Installations have also been made in the homes of several Purdue professors.

A new and larger factory.. increased facilities . . greater sales in 1930!

Copeland has just completed another important expansion—the third major move of its kind in the past four years!

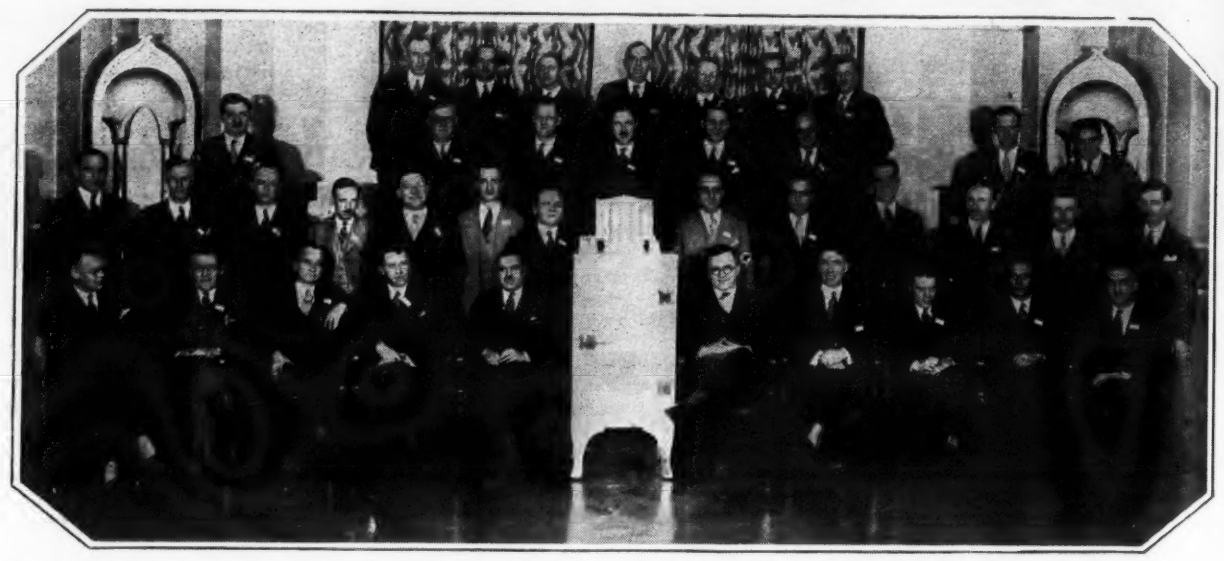
Pictured above is the new Copeland factory at Mount Clemens, Michigan, where ideal manufacturing conditions and modern facilities provide for the increased production of Copeland Dependable Electric Refrigerators for the home, Copeland Water Coolers and Copeland units for apartment and commercial use.

While Copeland has always enjoyed an enviable volume of *profitable* business, this most recent expansion will undoubtedly signalize an era of even greater prosperity. The year 1930 will witness new high records of production and profits . . . and far-sighted distributors will have occasion to congratulate themselves on having acquired the Copeland selling franchise.

COPELAND SALES COMPANY
332 CASS AVE. :: MT. CLEMENS, MICH.

Copeland
DEPENDABLE ELECTRIC REFRIGERATION

Aim to Put More G. E.'s in Apartments



First Row (left to right)—W. D. Jackson, T. A. Givens, F. A. Gallagher, F. T. Harris, H. J. Jenkins, J. J. Donovan, J. Zweedyk, Richard Delmarle, A. H. Harris, A. G. Muenzenmaier.

Second Row—G. D. Kobick, F. F. Carson, E. B. McClelland, J. M. Breed, H. C. Blinsinger, C. F. Davis, Frank Knott, A. E. Miserocchi, E. B. Cobb, Lee Caswell, H. C. Will, E. H. Norling, Paul H. Dow.

Third Row—R. M. Sausaman, D. J. Foy, G. W. Cabell, A. Hayward, W. H. Leahy, J. B. Ballantine, C. M. John, A. Truax.

Fourth Row—H. B. Millar, L. H. Webber, E. O. Gee, H. C. Louchman, A. E. Morton, M. L. Kidner, S. D. Webb.

KELVINATOR AWARDS EMBLEMATIC RINGS TO CRACK SALESMEN

Detroit, Mich.—Kelvinator Corp. on November 18-19 was host to 22 salesmen, headed by Allen Black, of New York City, who won the presidency of the Kelvinator International Sales Club. The men all won their trip to Detroit as part of the reward for their selling victories. Each had to lead salesmen in the same locality, as well as others, throughout the state in which they operated—oftentimes throughout two or three states.

The cavalcade of star salesmen was met at the Statler Hotel by executives of Kelvinator Sales Corp., who personally welcomed each individual at a special breakfast.

The men then adjourned to the Kelvinator plant on Plymouth Road for an inspection of the factory, after which they were entertained at a special luncheon, at which Vice-President H. W. Burritt presided.

President G. W. Mason presented each salesman with an emblematic ring, specially designed for the occasion, and thanked each individual for his successful sales efforts, which, he explained, were really the basic factors that have contributed towards the unusual sales records Kelvinator has made within the past quarter.

The salesmen were banqueted at the Hotel Statler by Kelvinator executives, and entertained at a theatre party, at the conclusion of which they went by special car to Grand Rapids to be guests of the Leonard Refrigerator Co., division of Kelvinator, where the cabinets are manufactured.

Leonard executives entertained the party, which was under the guidance of Earl Lines, advertising director, and John S. Garceau, sales promotion manager. A trip through the Leonard plant was made.

Following is a list of the star salesmen who made the trip:

Allen Black, Kelvinator Sales Corp., New York City, *president;* E. James, Kelvinator Sales Corp., New York City, *vice-president apartment division;* W. I. Taylor, Kelvinator-Kansas City, Kansas City, Mo., *vice-president domestic division;* H. Nichols, Commonwealth Edison Co., Chicago, Ill., *vice-president builders' division;* M. T. Stolber, Milwaukee Elec. Railway & Light Corp., Milwaukee, Wis., *vice-president commercial division;* Roy McElhaney, Kelvinator Sales Co., Huntington, W. Va., *vice-president general division;* Arthur J. Bardish, Consumers' Power Co., Grand Rapids, Mich.; Glenn C. Bartlett, Kelvinator Sales Corp., New York City; M. H. Batz, Kelvinator Buffalo Co., Buffalo, N. Y.; Geo. W. Beaudoux, McLeish Kelvinator Co., Columbus, Ohio; M. D. Breschel, Kelvinator-Kimmel, Inc., Jacksonville, Fla.; Beryl Crist, Martin Lumber Co., Port Arthur, Tex.; E. A. Dahl, Minneapolis Gen'l Electric Co., Minneapolis, Minn.; C. C. Francis, Hot-N-Kold Corp., San Francisco, Calif.; Bertram C. Phelps, Consolidated Gas, Electric Light & Power Co., Baltimore, Md.; Leon Rykken, Knoedler & Shaw, Oak Park, Ill.; A. M. Schwartz, Kelvinator-Cincinnati, Inc., Cincinnati, Ohio; J. C. Vollintine, Iowa Railway & Light Corp., Marshalltown, Iowa; C. L. Webb, Southern Radio Equipment Co., Little Rock, Ark.; R. H. Wells, Pocatello, Idaho; C. R. Welsh, Electrical Equipment Co., Phoenix, Ariz.; Sam West, Public Service Co., Denver, Colo.

The Secret is Work

THOSE who employ and depend on others testify unanimously that the weakness of talented men is laziness.

Young men of outstanding promise are given first-class positions. They have the ability to discharge their responsibilities, but two-thirds of them don't, and the reason is that they won't work hard. After a half-dozen depressing experiences with such men, employers cease looking for men of brilliance, and resort to steady pluggers.

Every first-class man observes, as he moves through life, that he passes others who are just as smart as he. The difference between himself and the others, he perceives, is his willingness to work hard. That's why he suggests hard work to the young men who are trying to follow him.—The Ediphone.

GENERAL ELECTRIC MEN PLAN ACTIVITY IN APARTMENT FIELD

Cleveland, Ohio—The third Apartment House Managers' conference, given under auspices of the Refrigeration Department of General Electric Co., was held at Refrigeration Institute, Nov. 18-19. Practically every large city east of the Rocky Mountains was represented. Paul H. Dow was chairman of the two-day program. On Monday, Nov. 18, the program was as follows:

Opening remarks, J. J. Donovan, manager, Apartment House Division.

Methods Used to Increase and Complete Deliveries in Buildings Covered by Blanket Contracts, E. B. McClelland, Philip H. Harrison Co., Newark, N. J.

Use for Sales Promotion Material by Apartment House Division, O. C. Hamilton, Sales Promotion Division.

Kitchen Planning, R. J. Weppner, Engineering Division.

Selling the Speculative Builder of Individual Homes, F. F. Carson, Electric Utilities Corp., Detroit, Mich.

Methods of Financing Apartment Sales, G. D. Kobick, Apartment House Division.

Special Features of Product, W. M. Timmerman, commercial engineer.

Co-operating with Your Product Department to Increase Apartment Sales, H. J. Jenkins, Apartment House Division.

How Advertising is Helping to Sell the Price Difference, W. E. Underwood, Lord & Thomas & Logan.

After a banquet at Hotel Statler, H. S. O'Neal, vice-president, Equitable Bond & Mortgage Co., Chicago, Ill., spoke on "Apartment House Electric Refrigeration from the Investment Standpoint." The Tuesday, Nov. 19, program included the following:

What a Survey Shows, F. E. Case, Philip H. Harrison Co., Newark, N. J.

A National Service to Architects, Scott Button, Schenectady, N. Y.

Correspondence Course, E. Norling, Sales Promotion Division.

Selling Features, H. J. Jenkins.

The Position of the General Electric Apartment Salesman in the Refrigeration Industry, A. C. Mayer, manager, Merchandising Service Division.

Selling the Architect, Leroy Kern, secretary, Structural Service Dept., A. I. A.

An Actual Sale, R. Cooper, Jr., Chicago, Ill.

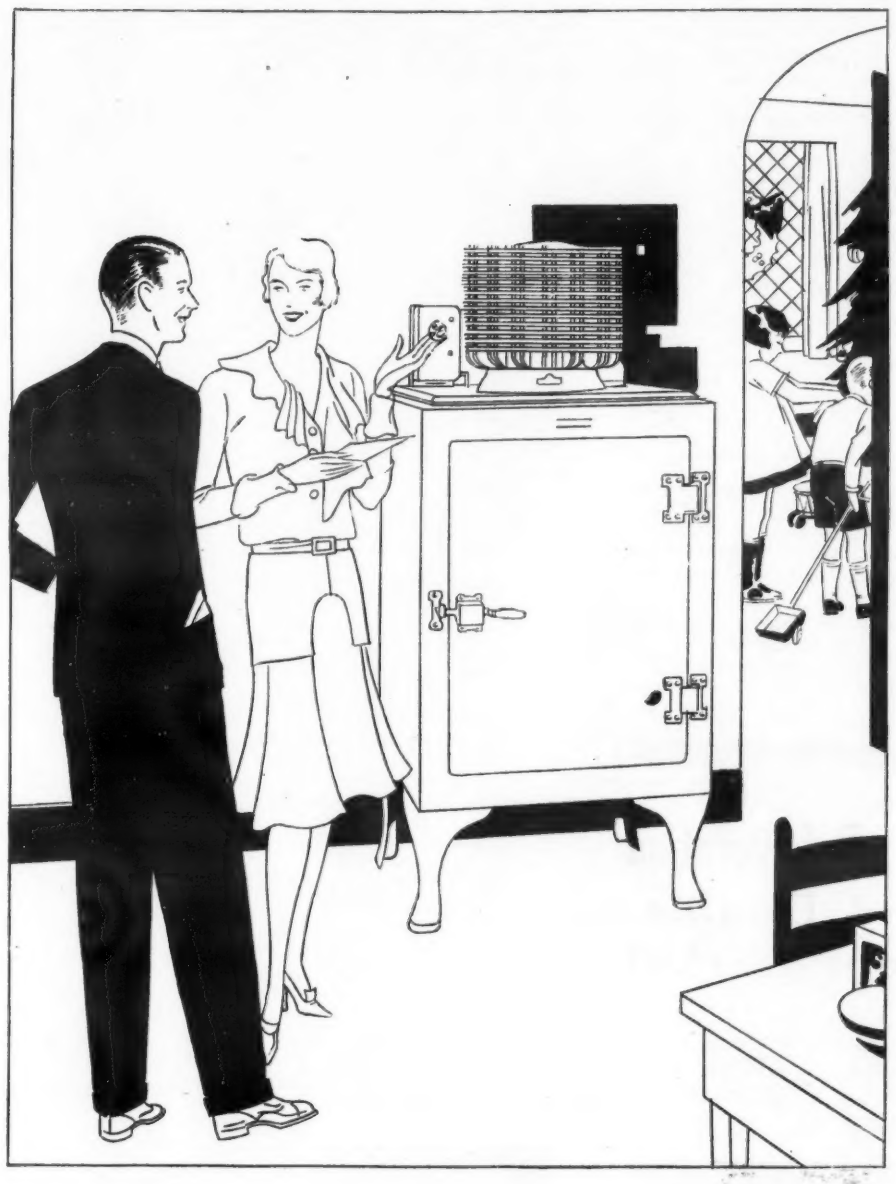
Selling the Price Difference (Presentation) and closing, J. J. Donovan.

Star Salesmen Win Trip to Detroit

Kelvinator International Sales Club (See story above)

Swell *the Christmas* sales volume

~with GENERAL ELECTRIC REFRIGERATORS



CHRISTMAS only three weeks away! Thousands of people now puzzling over their gift lists. Every puzzled person is a prospect for an electric refrigerator. What an opportunity for General Electric Refrigerator Dealers!

And people everywhere are in the *mood to buy*. They are casting about for the most suitable family gift. Dealers who now make an effective window display, who use the General Electric selling helps, will reap a rich winter harvest. The "All-year-'round Refrigeration" campaign has fertilized the ground.

General Electric Refrigerators appeal to gift-hunters in a score of different ways. They are as attractive as they are serviceable. Their all-steel cabinets will not warp, the doors cannot sag. Their hermetically-sealed, permanently oiled mechanism gives thoroughly trouble-free service for many years. This is proved by the fact that *not one* of the hundreds of thousands of users has spent a dollar for service or repairs.

But the public has to be told . . . about these many advantages. We're doing our share through our national advertising. You can tie-in with this publicity . . . in your own interest . . . through window and inside store displays, through local advertising, through direct-mail. Here again we can help you . . . ask us.

Tell the gift-hunters how General Electric Refrigerators represent the greatest advance in refrigeration history, through their superior mechanical features, scientifically correct. Tell them how a General Electric Refrigerator brings new freedom from household cares, new ease in the preparation of delicacies for the table, new protection against wasteful food spoilage, new opportunity for the home manager to save money through quantity food purchases.

Anyone who gives a General Electric Refrigerator has the satisfaction of knowing he has chosen the most welcome, most modern refrigerator . . . the one for which there is the most outstanding preference today . . . and which anyone will be MOST PROUD TO OWN.

Backed by the enormous prestige of the General Electric name . . . and backed too by the unqualified General Electric guarantee . . . your selling job should be easy, and your profits high this Christmas.

GENERAL ELECTRIC

ALL-STEEL REFRIGERATOR

ELECTRIC REFRIGERATION DEPARTMENT OF GENERAL ELECTRIC COMPANY, HANNA BUILDING, CLEVELAND, OHIO.

SERVEL PLANS BIGGER PROFITS FOR DEALERS

MAJOR TOPIC AT SERVEL CONVENTION CONCERNS DEALER FRANCHISES

(Concluded from Page 1 Column 3)

added and will be sold at the present popular price for that size of refrigerator. The full line of commercial machines is being continued but added to by some additional models of intermediate sizes adapted especially to certain very profitable applications.

"Therefore, Servel, not having the problem of introducing a new line of models and reassured by its general satisfactory operations of 1929, has devoted prime consideration toward the remodeling of its dealer franchise for the coming year with the object of assuring a prosperous and permanent place for Servel dealers in this great industry. The remodeled dealer franchise will be a progressive step in the marketing of automatic refrigerators. The greater franchise value is not alone in terms of discount, or greater value per dollar, or in advertising co-operation, but rather by reason of its policy, selection of market and application best suited to dealer profits. This new plan for our dealers is based upon the analysis of our marketing needs as brought to us by the Servel organization in the field."

New models introduced to the conference were the new four cubic foot with cabinet by Seeger, two new air-cooled machines for commercial use, the 75A and the 100A, with ice melting equivalents of 565 pounds and 700 pounds, respectively.

In commenting upon the absence of new household models, except the 4-foot cabinet, V. E. Vining, sales manager, said:

Lower Prices—Longer Discounts

"So universal has been the acceptance and satisfaction with our present household line that we have made no changes in it. Distributors, dealers and the public are enthusiastic over its performance.

"We have, however, made two vital changes, one in lengthening the discounts and the other in reduction of list prices. With these two factors, and with the highly satisfactory operation of the units, Servel distributors can look forward to a most successful 1930."

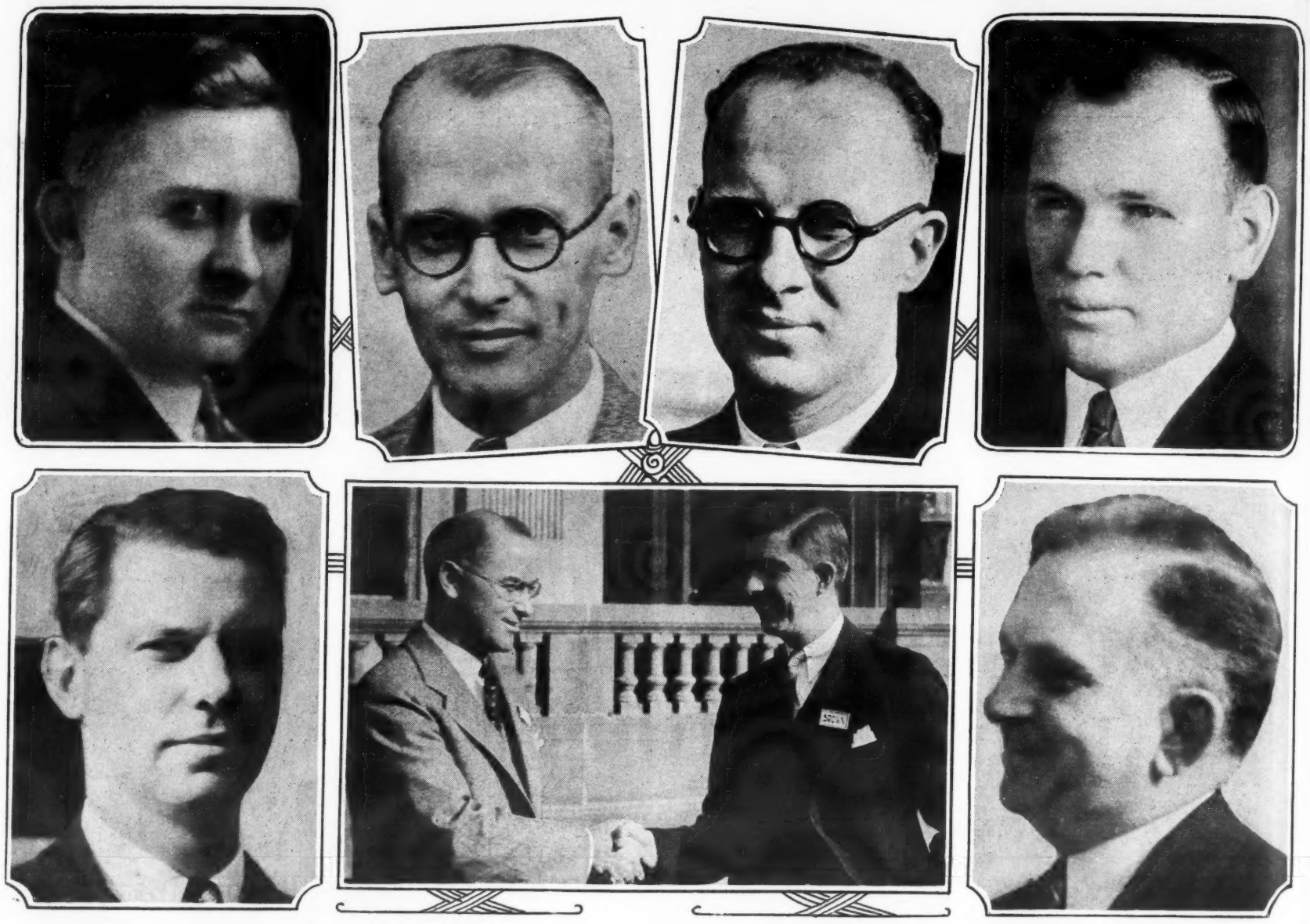
Carl H. Conkey, newly appointed commercial sales manager, presented the Servel commercial line for 1930, consisting of ten commercial machines, both air and water cooled, ranging from the small 225 pound machine to the water-cooled 800 pound unit. In addition to the widening of the machine line, new chilling sections and supplemental equipment were announced.

Advertising plans announced by A. T. Golding, advertising manager, include a complete set-up for dealer operations, with intensive factory advertising programs for local territory. A new co-operative advertising plan, considered to be the widest and most generous in the industry, was announced. By the operation of this plan, a substantial proportion of each distributor's purchases will be re-allocated to him for expenditure in developing his own retail sales.

The market for water coolers was discussed by L. M. Lane, of the Water Cooler Division, while E. H. Culver and Wm. Aulsebrook, also of the Commercial Division, developed the milk and beverage cooling equipment. New developments in all this equipment was introduced to form the basis for more extensive sales in 1930.

"Sell Uses—Not Machines"

"Don't worry a woman about how the wheels go round," said V. E. Vining, in a discussion of retail selling, "but demonstrate how your cabinet itself will fit into her kitchen operations. What she wants to know is where and how she is going to save time, trouble, food and money, not how many B. t. u.'s there are, or how many times a minute the wheels turn round."



(Above—left to right)—C. A. Miller, Chicago Electrolux zone manager, who received a gold prize for conspicuous effort during the current year. George L. Roach, assistant Electrolux sales manager, spoke on "Our Job for 1930." P. J. Griffin, district sales manager, won first prize for best order for November delivery. Alvin Thrasher, district sales manager, received first prize for the best Electrolux franchise delivered to the convention. He lined up all the Oklahoma Natural Gas Co. properties to sell the gas refrigerator.

(Below—left to right)—MacLean Hoggson, district sales manager, turned in the second best order for November delivery and won second prize. H. W. Foulds, vice president in charge of distribution, congratulating B. O. Brown, zone supervisor, on his five million dollar Electrolux sales record during 1929 in Metropolitan New York territory. A. W. Grossman, who was promoted from district sales manager to zone supervisor.

GAS UNIT IS IMPORTANT COMMODITY IN 900 CITIES

WELL planned sales efforts and consistent advertising has brought the gas refrigerator from its modest beginning three years ago, to an important commodity in more than nine hundred cities, was the substance of the report of the committee on refrigeration, submitted during the recent meeting of the American Gas Association in Atlantic City. H. G. Gill, of the Washington Gas Light Company, Washington, D. C., who was chairman, stated in his report that the year's progress has been most satisfactory. Not only had many new utilities become distributors for gas refrigerators, but those already merchandising the product had gone rapidly ahead, Mr. Gill stated.

HEADS DOMESTIC SALES IN GRAND RAPIDS

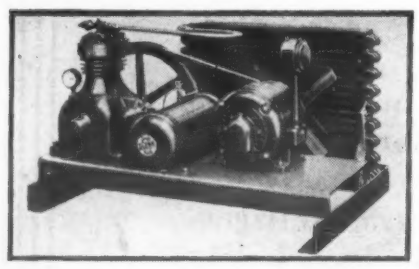
Grand Rapids, Mich.—Neil DeYoung has been appointed domestic sales manager of the Kelvinator department of Consumers Power Co., distributors here. Prior to returning to Grand Rapids, Mr. DeYoung was with the Kelvinator sales organization in Pittsburgh. He was former city passenger agent in Grand Rapids for the Pere Marquette Railway.

COLDAK CORP. MOVES TO LONG ISLAND CITY

Long Island City, N. Y.—Coldak Corp. has moved its office and salesroom from 1775 Broadway, New York City, to 35 Wilbur Ave. here.

Add Dairy Refrigeration and Double Your Market

SPECIAL refrigeration units for dairy farms are sweeping the country because they enable the farmer to get Grade "A" prices for his milk and cream.



Glenn Dairy Icer

$370.00 Installed

(Retail Price)

"A machine that will do the work . . . at a price you can afford to pay"

The above quotation having originated with our first customers just naturally is the voluntary expression of every **Glenn** user.

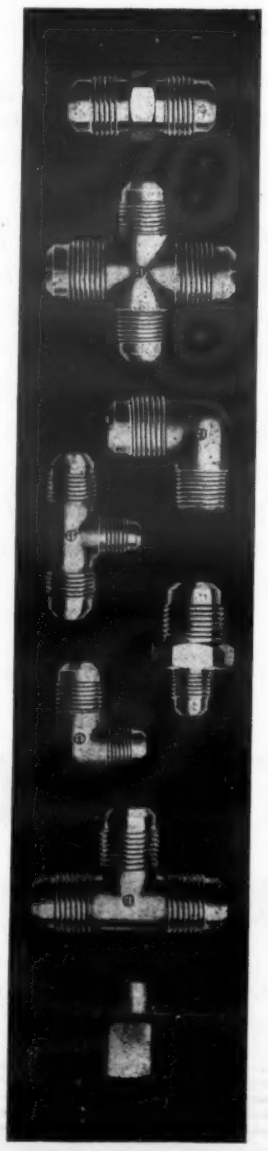
"Capacity" is What the Farmer Wants

The Glenn Dairy Icer cools 30 cans of milk. It has a capacity equal to 900 lbs. of ice melting in 24 hours.

Because we ***specialize*** in Farm Refrigeration we believe we are better informed and better equipped to aid you in developing this valuable market.

Write for our Attractive Dealer Plan

DAIRY REFRIGERATION CO.
INCORPORATED
Manufacturers of Refrigeration Equipment for every purpose
Dept. E, 311-64th Ave. Milwaukee, Wis.



FORGED BRASS FITTINGS

Seepage Proof

Commonwealth Pipe and Tube Fittings are non-porous. Of close grained metal of homogeneous composition and exceptional strength.

Hot-forged under tremendous pressure these fittings are unaffected by contact with any of the chemical solutions used in Automatic Refrigeration.

Built Right - - to Stay Tight

Send For Catalog No. 36.

COMMONWEALTH BRASS CORPORATION
Commonwealth and G. T. R. R.
Detroit, Mich.

For Automatic Refrigeration Manufacturers

Whatever you require in copper, brass, bronze, or copper alloys, we are prepared to furnish on contract either parts or sub-assemblies ready for installation in your unit. Boilers, compression nuts, filters, floatballs, condensers, special nipples, bellows and thermostats, and a large variety of other standard parts.
Let us quote on your requirements.

Bridgeport Brass Co.
General Motors Building
Detroit, Mich.
General Offices and Plant
Bridgeport, Conn.
Offices in Principal Cities

"Bridgeport"

The leading refrigerator manufacturers are buying

BOSLEY'S
"Ice Saver" Gasket
for it is the best uniform quality insulation
Write us
The D. W. Bosley Company
1901 Carroll Ave. Chicago, Ill.

PRIZES AWARDED TO BIG SHOT MEN OF GAS MACHINE FIELD

Evansville, Ind.—Announcements by H. W. Foulds, vice president in charge of distribution, Servel Sales, Inc., that over one million dollars would be spent during 1930 on Electrolux advertising; that production of Electrolux gas refrigerators will be more than doubled next year; and current sales for 1929 were 100 per cent ahead of previous distribution, were highlights of the business sessions at the Second Annual Electrolux Sales Convention, November 11-13, reported briefly in the November 20 issue of the NEWS.

In closing, Mr. Foulds introduced the newer members of the sales organization and the New York executives who attended the meeting. He personally paid tribute to B. O. Brown, zone supervisor of the New York area, who qualifies as a five-million-dollar salesman. He also announced the promotion of A. W. Grossman from district sales manager to zone supervisor for the southeastern territory, in recognition of the fine record achieved this year.

The convention began Monday morning, November 11, at the Hotel McCurdy. Mr. Foulds' address of welcome was followed by a talk on "Our Job for 1930," by George L. Roach, assistant sales manager of Electrolux, who outlined the organization plan of the sales department for next year.

In a short address, "Everybody's Asset—Territory," by A. H. Remsen of the general sales department, pointed out the major changes which will be effective shortly after the first of the year. The territorial assignments for 1930 show practically every key city in the country covered by distributors. Future plans call for more intensive work in local districts, with the addition of man power to promote closer contact with dealers and their representatives.

F. G. Parker, zone supervisor, outlined the functions of "The Successful Distributor" and some of the problems which he has to face.

During the group luncheon Isaac Salm, director of the Evansville Chamber of Commerce, thanked the Electrolux representatives for the great volume of business they had contributed to Evansville's prosperity for 1929.

The afternoon session began with a talk on "Selling the Utility," by C. A. Miller, zone supervisor. He pointed out the fact that the majority of utilities are now merchandising their own gas appliances and that Electrolux was unique in the field.

H. S. Boyle, sales promotion manager, discussed "Sales Promotion," sketching a few of the special campaigns which are now being offered to dealers and utilities.

"Performance vs. Quotas" was the subject chosen by H. E. Burns, statistician, in giving a brief summary of the individual quotas for next year. Mr. Burns illustrated his point by charts and diagrams based on future expectancy.

Following this talk, newsboys rushed into the room with a special edition of local newspapers, in which large welcome advertisements appeared, as well as a complete local write-up of the sales meeting. A special edition of Electrolux Refrigograms was also distributed, offering humorous personal comments on the field men and executives.

The second day's sessions were opened with group breakfasts, with the field men arranged according to zones. A model sales meeting, conducted by Mr. J. W. Crashley, district sales manager, was followed with a talk on "1930 Distribution Policies" by Mr. Foulds.

An address on retail merchandising was next offered by Charles L. Low, president of Charles L. Low, Inc., Chicago, who contributed much to the success of the new Electrolux Sales Portfolio.

R. R. Guenther next delivered a paper on "Service Promotion," in which he explained the newly organized service promotion department and its functions. A corps of sales engineers is now taking the field and will work with district representatives in carrying on special educational work. Mr. Guenther also mentioned that more intensive work will be conducted at the factory in Evansville, on service schools, during 1930, and special plans will shortly be formulated to arrange for territorial groups.

"Fifty-one Per Cent Selling" was the topic covered by Seward Abbott, who explained some of the major problems in the field and offered solutions for their successful handling.

Following luncheon at the Shrine Mosque, William Reynolds, advertising manager, presented the Electrolux national advertising plans for 1930. Over a million dollars will be spent for Electrolux advertising next year, with all advertisements in national publications appearing in four colors. A distinctive type copy and art treatment will be employed to create recognition for the product. Co-operative newspaper advertising will be employed as formerly, with the addition of several new publications on the magazine schedule and a great volume of new consumer literature.

Harry Vawter, of the Curtis Publishing Company, Philadelphia, arrived in Evansville by plane to attend the meeting, and congratulated the Electrolux sales organization on the remarkable progress achieved.

On Tuesday evening, a formal banquet was held, at which short talks were made by F. G. Combler, assistant to the president; D. L. Adkins, secretary of Servel, Inc.; F. P. Nehrbas, vice-president in charge of production; W. F. Thatcher, vice-president of Servel, Inc.; A. R. Sager, purchasing agent; A. F. Theis, production manager.

In accordance with a pre-arranged schedule a number of prizes were distributed to the field representatives for individual accomplishments during the past year. The prize for the best performance of the year to date was awarded to B. O. Brown, zone supervisor, who secured over five million dollars worth of orders. Five additional prizes were presented to the following in the same classification: E. J. MacSweeney, district sales manager; J. W. Crashley, district sales manager; C. E. Colyer, export manager; A. W. Grossman, zone supervisor; and R. P. Haskin, district sales manager.

A. Thrasher, district sales manager, received the gold award for the best franchise brought into the convention. P. J. Griffin, district sales manager, received a prize for the second best order. Honorable mention was also given to H. L. Stearns, district sales manager, for the second best franchise.

In addition to these awards, prizes were also presented to the following, in recognition of conspicuous effort in their respective territories: C. A. Miller, zone supervisor; H. L. Stearns, district sales manager; A. E. Lee, district sales manager; Seward Abbott, district sales manager; H. W. Leighton, sales representative; and Gene McDonald, sales engineer.

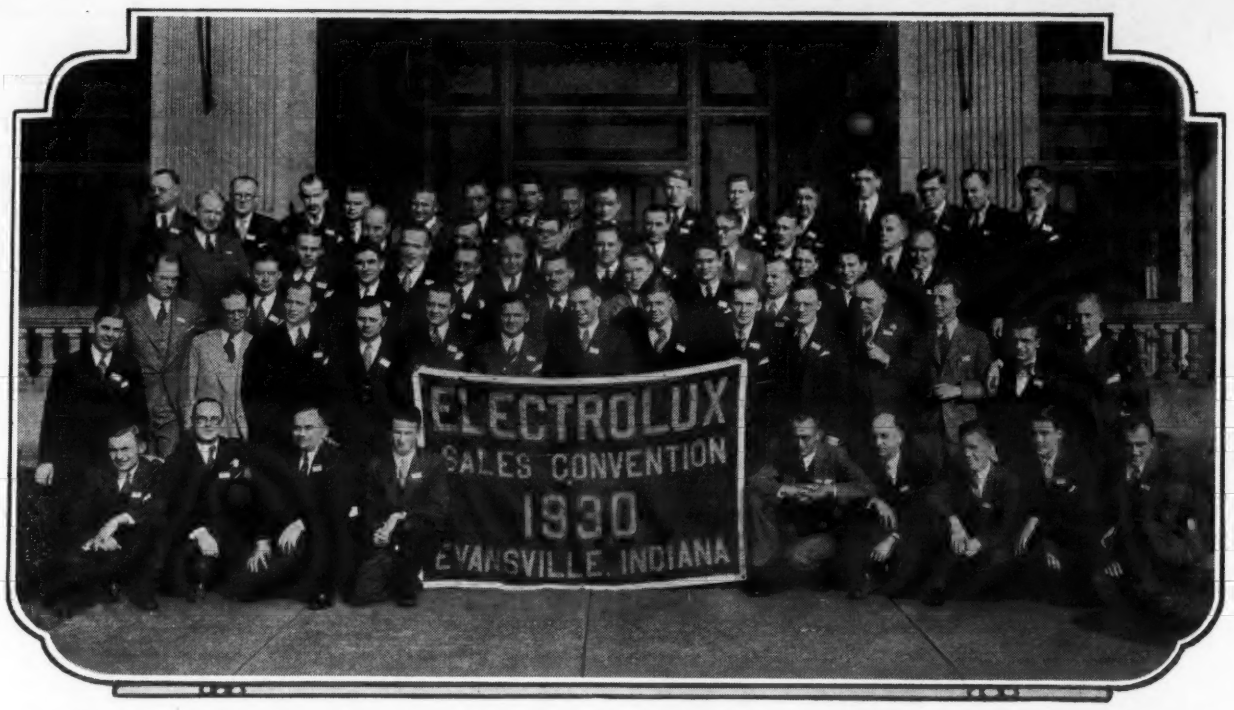
Gifts were also presented to F. E. Sellman, consulting engineer, and Egbert White, agency representative. Wedding gifts were presented to George R. Copeland and MacLean Hoggson, whose announcements were issued during the evening. Mr. Foulds also presented each of the sales representatives with a "Fit-All" traveling case.

All the details of the convention were handled by the following committee: H. W. Foulds, honorary chairman; George L. Roach, chairman; T. A. Flaherty, secretary; C. A. Miller, H. S. Boyle, R. R. Guenther, A. H. Remsen, W. A. Rorison.

BEDELL TO ENTER BUSINESS IN AUSTRALIA

Louis R. Bedell has severed his connections with the Bedell Engineering Company, of Los Angeles, California, and will establish a similar business in Sydney, Australia. He sailed from Hongkong for Sydney on October 21. He plans to develop a local manufacturing and assembling business in refrigeration equipment and will also represent American manufacturers.

Electrolux Representatives Gather to Consider "Our Job for 1930"



(Reading left to right) *First Row*—C. A. Miller, H. S. Boyle, A. W. Grossman, W. A. Rorison, G. L. Roach, R. P. Haskin, D. E. Williams, R. R. Guenther, C. E. Johnston.

Second Row—B. O. Brown, H. W. Foulds, Wm. Drumpelmann, A. Thrasher, J. G. Teter, R. Peters, A. J. Bodenmuller, C. E. Colyer, R. B. Moore, H. H. Roth, Seward Abbott, H. M. Gallager, F. G. Parker, William Reynolds, Harry Vawter.

Third Row—A. J. McGinty, Gantt Baggot, Egbert White, Clarence Spiegel, W. G. Elliott, Glen Krieckhaus, J. W. Crashley, H. M. Molyneux, H. L. Bickel.

Fourth Row—George R. Copeland, E. J. MacSweeney, A. E. Lee, H. L. Stearns, L. D. Pangborn.

Fifth Row—T. A. Flaherty, F. P. Combler, Robert Mack, Gene McDonald, Edward A. Hosp, H. W. Leighton, R. C. Bonsiegnur, F. E. Sellman.

Sixth Row—L. A. Hubbs, P. J. Griffin, D. C. Lewis, H. E. Burns, J. F. Leighner, E. A. Dunham, A. L. Spring, H. L. Miller, C. L. Carson, George I. Bushfield, MacLean Hoggson, A. H. Remsen, W. D. Taylor, W. R. Hainesworth, H. G. Kebel.

BRECKENRIDGE ACQUIRES ARNOLD-ERVIN INTERESTS

Davenport, Iowa—D. E. Breckenridge, formerly general manager of the E. H. Schaefer Corp., distributors of General Electric refrigerators in Milwaukee, Wis., has acquired the General Electric distributor franchise in this territory through the purchase of Arnold-Ervin Company's interests. Mr. Breckenridge is now president of the company.

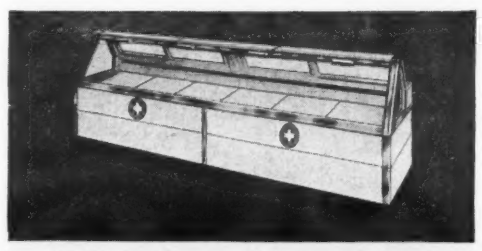
Prior to being general manager for the Milwaukee distributor, he was with the Premier Vacuum Company, a subsidiary of the General Electric Co., and later was Chicago district representative for the Refrigeration Department of the General Electric Co.

William H. Schladtz, formerly commercial sales manager for Schaefer Corp., is now in charge of commercial sales in the Davenport territory. He is directing sales of commercial refrigerators, water coolers, milk coolers and ice cream cabinets. Mr. Schladtz has been associated with the electric refrigeration industry for the past five or six years, and prior to that time was engaged in the sale and sales promotion of ammonia machines for fifteen years.

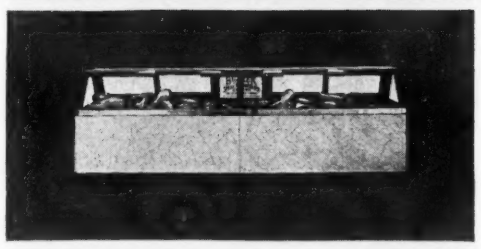
HAITI DEALER VISITS KELVINATOR PLANT

Detroit, Mich.—George H. Benskin, of Kneers Garage, Kelvinator dealers at Port Au Prince, Haiti, was a recent visitor at Kelvinator factory.

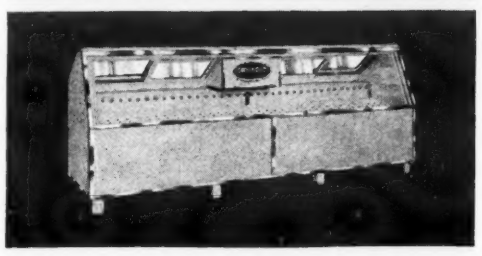
Kneers Garage, with which Mr. Benskin is connected, recently installed compressors to refrigerate the large meat cooler in use by the United States Marine Corps detachment stationed at Port Au Prince.



Monel Metal trimmed display case, manufactured by HARRY L. HUSSMANN REFRIGERATOR CO. of St. Louis, Mo.



"The Master" spray refrigerated counter, Monel Metal lined and trimmed. Manufactured by BLAZEK & CO. of Chicago, Ill.



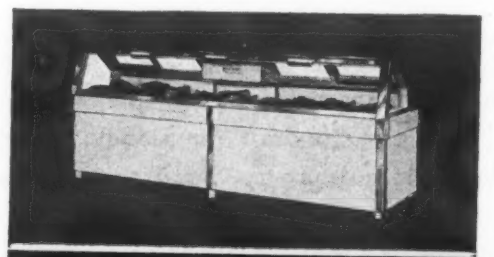
Monel Metal trimmed Perfection Display Refrigerator, manufactured by THE "DRY-KOLD" REFRIGERATOR CO. of Niles, Mich.

Monel Metal Trim

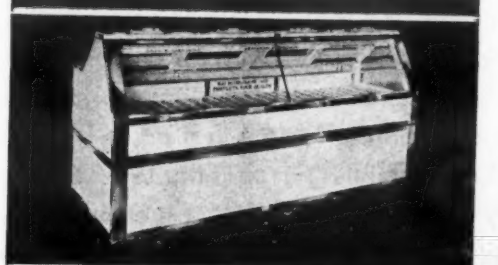
helps sell modern display cases!

EVER since mechanical refrigeration first gave impetus to the sale of store display cases, Monel Metal has been the most popular material for trim and bright work. Leading manufacturers have adopted this lustrous Nickel alloy because it affords a remarkable combination of desirable properties.

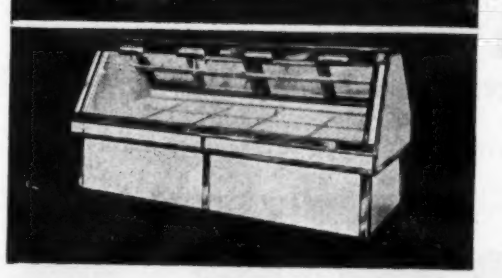
Monel Metal CANNOT rust. It resists corrosion. It has no coating to chip, crack or wear off. The silvery appearance of Monel Metal is permanent. It can always be kept bright and fresh-looking with very little cleaning. Specify Monel Metal trim for your new display case.



Monel Metal trimmed store display refrigerator manufactured by McCRAY REFRIGERATOR SALES CORP. of Kendallville, Ind.



Display case with Monel Metal trim, manufactured by OTTENHEIMER BROS., INC. of Baltimore, Md.

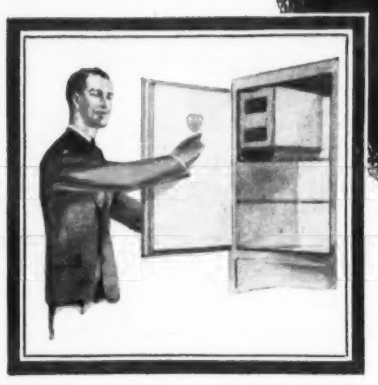


"Thesco" Monel Metal trimmed display case, manufactured by THE C. SCHMIDT COMPANY, Cincinnati, Ohio.

MONEL METAL

Monel Metal is a technically controlled Nickel-Copper alloy of high Nickel content. It is mined, smelted, refined, rolled and marketed solely by The International Nickel Company, Inc. The name "Monel Metal" is a registered trade mark.

THE INTERNATIONAL NICKEL COMPANY, INC., 67 WALL STREET, NEW YORK, N. Y.



GUARANTEE of QUALITY

The walls of this refrigerator are insulated with DRY·ZERO established by the U.S. Bureau of Standards as the most efficient insulation known to science

This Mark of Insulation Supremacy Helps You Sell!

Every refrigerator manufacturer now realizes that the matter of insulation should not be passed over lightly—should not be met in the cheapest way possible. The Dealer also recognizes that quality throughout is a thing of great importance, for in this field the buying public demands a quality product. The customer is being educated to know that although one cannot see the insulation it is nevertheless a vital part in the success or failure of the unit itself. The Dry-Zero mark of quality on a refrigerator is an important visible selling point for manufacturers and dealers. Even the finest unit can be made to function more efficiently when the cabinet is insulated with Dry-Zero. This insulation supremacy, proven in tests by the U. S. Bureau of Standards, establishes Dry-Zero as the most efficient commercial insulant known.

Bought on the BTU basis, it is also the most economical. The Dry-Zero Corporation invites price comparison on the basis of equivalent permanent insulating value. And that is the only practical and fair standard for judging an insulation's worth.

*Freedom from moisture troubles, freedom from insulation odors, freedom from continuous operation of the machine—as well as needless wear and tear—is what Dry-Zero offers the prospective buyer. For you it means an added advantage—lightness in weight, lowering transportation and handling costs.

These are definite factors that go to build your personal success and satisfaction. See that the Dry-Zero mark of QUALITY is on every Dry-Zero insulated refrigerator. It will help you sell!

Authoritative proof of Dry-Zero's greater efficiency is clearly shown in the chart below. Let us send a sample of the Dry-Zero pliable slab—for your own test.

Comparative Values

established by U. S. Bureau of Standards, Armour Institute, State Universities and other impartial authorities.

Material	Wt. cu. ft.	Insulation Value	Absorption*
DRY-ZERO	2 lbs.	4.15 to 4.3	14
Corkboard	9.5 to 13 lbs.	2.9 to 3.3	28
Wood fibre board	13 lbs.	2.9 to 3.2	115
Flax fibre board	13 lbs.	3 to 3.2	66
Cane fibre board	15 lbs.	2.7 to 2.9	78
Mineral wool slab	17 lbs.	2.6 to 2.8	

*Test run by University of Minnesota.

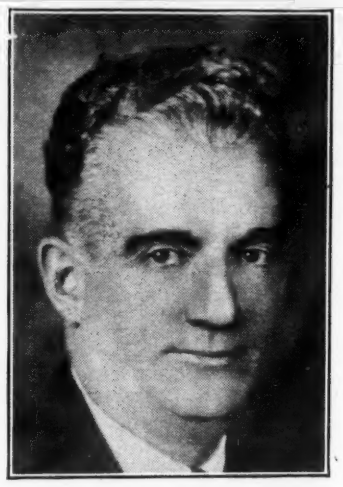
DRY-ZERO CORPORATION

130 N. Wells Street - - Chicago, Illinois

**The Dry-Zero fibre, CEIBA, is the same as that used in U. S. and other Navy Life Jackets*

DRY·ZERO

PERSONAL NEWS



F. P. Shea

Evansville, Ind.—F. P. Shea has been appointed assistant sales manager of Servel Sales, Inc. Mr. Shea came to Servel in 1928 from Copeland Products, Inc., as a division manager, which work he continued until his recent appointment.

NEWCOMB NOW MANAGER OF COPELAND SERVICE

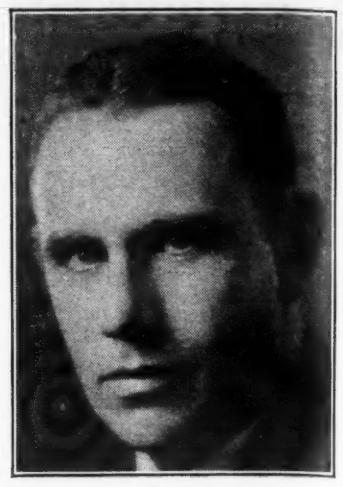
Mt. Clemens, Mich.—Copeland Products, Inc., announces the appointment of Harry Newcomb as manager of service, succeeding Edward Barger, who has been assigned to special work in the company's new plant at Mt. Clemens.

CHRISTOPHER TO MANAGE DANBURY BRANCH STORE

Danbury, Conn.—Howard Christopher has succeeded James B. Reynolds as manager of the Danbury branch store of Rex Cole, Inc., General Electric refrigerator distributors in New York City.

WEST LEAVES COPELAND

Detroit, Mich.—Frank R. West has resigned as engineer of Copeland Products, Inc., and vice-president of Copeland Silica Gel Corp., to carry on private research work.



E. R. Legg

Detroit, Mich.—E. R. Legg has recently been appointed eastern district sales manager of ice cream cabinet division, Kelvinator Sales Corp., with headquarters in New York City.

Mr. Legg is a graduate of Dartmouth and has been connected with the Kelvinator organization in a selling capacity since 1926. His first territory was Los Angeles and the Pacific Coast. During the past year he has been in charge of ice cream cabinet sales at the Kelvinator Boston branch.

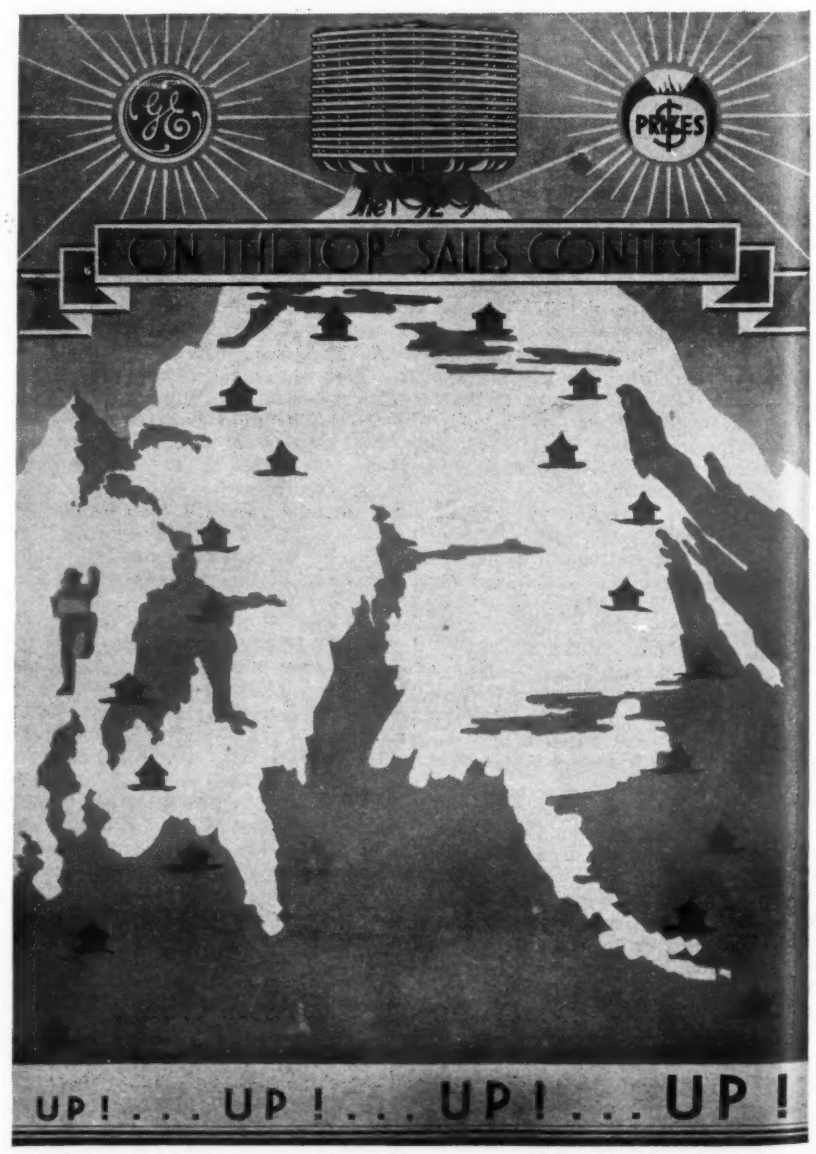
BOYER HEADS KANSAS CITY COPELAND COMPANY

Kansas City, Mo.—Appointment of Copeland Refrigerator Co., 1524 Grand Ave., as distributor for Copeland in Kansas City territory, was announced recently. W. A. Boyer, formerly associated with Western Radio Co., heads the new concern.

MARTIN OPENS SERVICE SHOP IN FRESNO, CALIF.

Fresno, Calif.—E. E. Martin, formerly connected with the Hot n Kold Corporation, Fresno Branch, has established Martin's Electric Refrigeration Service, at 631 Lincoln Avenue for the installation and servicing of all makes of sulphur-dioxide refrigeration systems.

Climbing the Mountain



PROGRESS of General Electric refrigerator salesmen in the "On the Top" sales campaign, which is mapped out as a mythical mountain-climbing contest, can be readily indicated on the large posters charting the course. Shelter houses are distributed along the mountain side and salesmen reaching them through the medium of successfully selling set quotas will receive prizes. The contest opened on Oct. 15 and closes Dec. 31 with the salesmen climbing the highest winning the prizes.

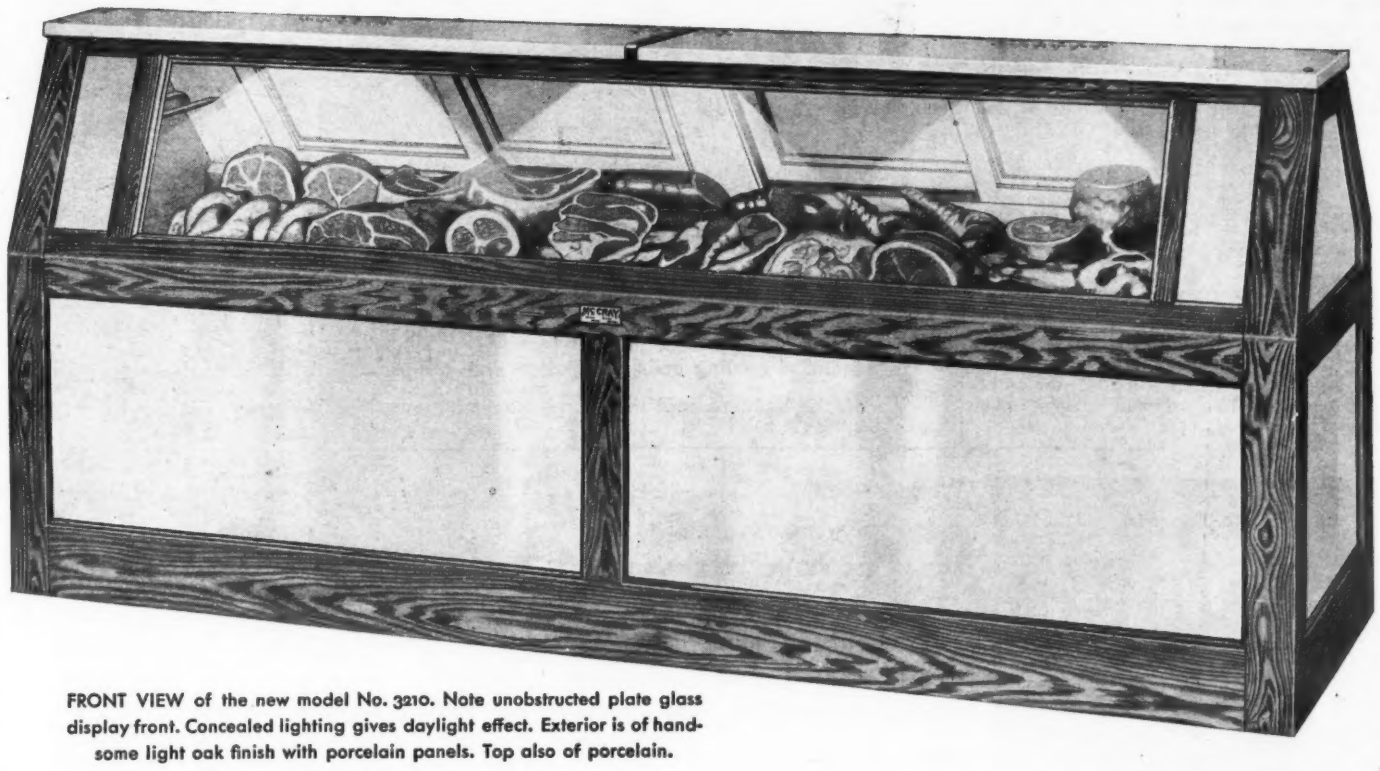
DISPLAY ››› STORAGE REFRIGERATION in a New Unit by McCray

HERE is an entirely new creation by McCray—a refrigerator case that combines in one unit the advantages of attractive DISPLAY, with a generous amount of space for refrigerated STORAGE.

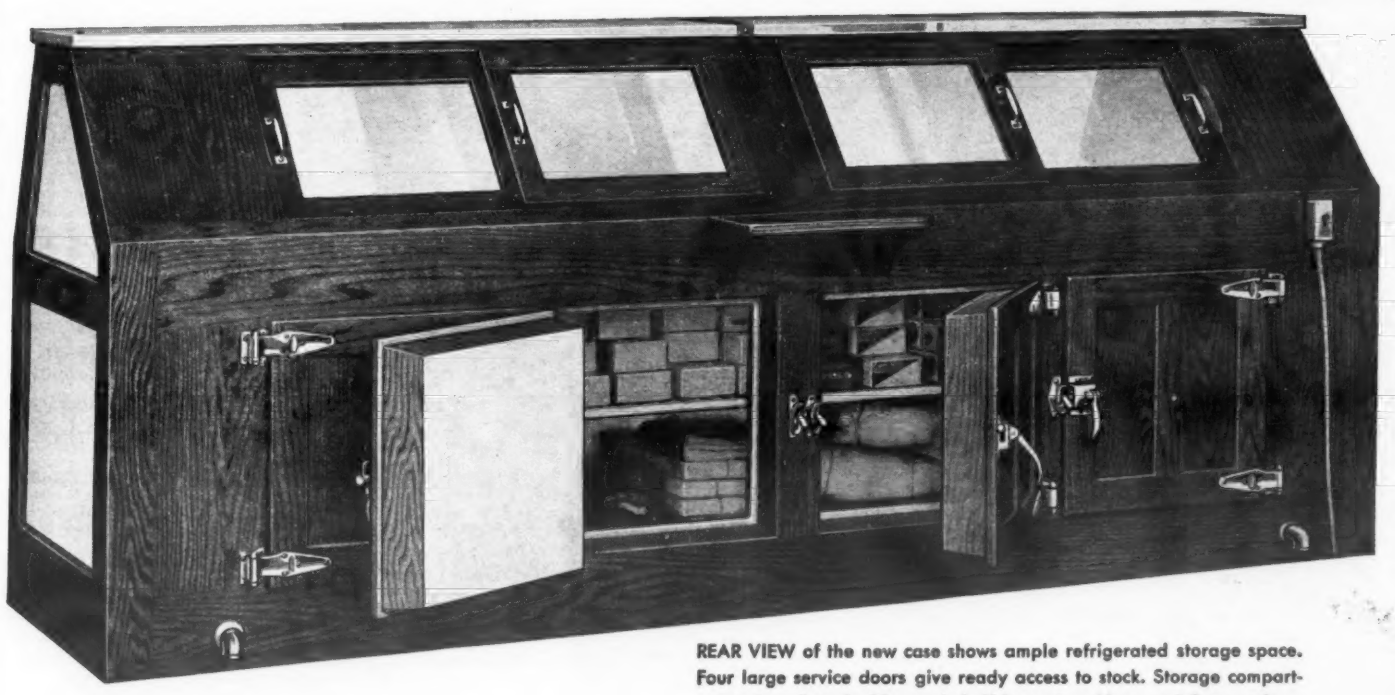
Designed to meet a real need, this new McCray model No. 3210 amply takes care of the requirements of food stores where limited room demands the greatest use of every foot of floor space. In the larger store this case serves adequately as an auxiliary to other equipment.

With a one piece display front of two courses of plate glass and FIFTEEN FEET OF DISPLAY SHELF SPACE, foods can be arranged with telling sales effect. Besides this, there is TWICE THAT AMOUNT OF STORAGE SPACE FOR RESERVE STOCK AND STAPLES. Quick access to this stock is obtained through four service doors in the rear.

And embodied in the new No. 3210 case is the well known McCray standard of construction; quality in every hidden detail which insures thorough, economical refrigeration with spoilage loss eliminated. Food merchants everywhere choose McCray equipment BECAUSE IT MEANS INCREASED SALES AND BIGGER PROFITS.



FRONT VIEW of the new model No. 3210. Note unobstructed plate glass display front. Concealed lighting gives daylight effect. Exterior is of handsome light oak finish with porcelain panels. Top also of porcelain.



REAR VIEW of the new case shows ample refrigerated storage space. Four large service doors give ready access to stock. Storage compartment equipped with wood shelf in center. Also wood floor rack.

For Use with Any Machine

THE McCRAY No. 3210 DISPLAY - STORAGE CASE is built for mechanical refrigeration only. As with all McCray models, any type machine can be immediately installed. No changes are necessary. In this unit, a coil space at each end provides for the cooling of the entire inner compartment. No partition separates the upper and lower sections. Pure corkboard insulation, sealed with hydrolene cement, keeps cold air in and warm air out.

WHATEVER TYPE MACHINE is used, the sterling in-built quality which has characterized the name McCray for 40 years, is a guarantee of the most satisfactory performance. This is of special interest to dealers in mechanical refrigeration as the right equipment is necessary for a successful installation.

McCRAY is the world's largest manufacturer of refrigerators for all purposes. Dealers in machine refrigeration should get the facts now regarding the McCray line. Write for catalogs. No obligation, of course.

McCRAY REFRIGERATOR SALES CORPORATION, Dept. 66, Kendallville, Indiana

SALESROOMS IN ALL PRINCIPAL CITIES (See Telephone Directory)

WORLD'S LARGEST MANUFACTURER OF REFRIGERATORS FOR ALL PURPOSES

McCRAY REFRIGERATORS

TOLEDO SALES METHODS ATTRACT ATTENTION OF FRIGIDAIRE HOME OFFICE

Toledo, Ohio—J. A. Harlan, sales manager of Frigidaire Corporation, Dayton, O., was here Nov. 30 to confer with E. H. Walker, distributor for thirty-two counties in Ohio, Michigan and Indiana.

A new organization plan, originated by Mr. Walker, has been so successful that Mr. Harlan personally secured full information about it. This plan will be featured at the Frigidaire distributors' and branch managers' meeting in Dayton on December 4-5.

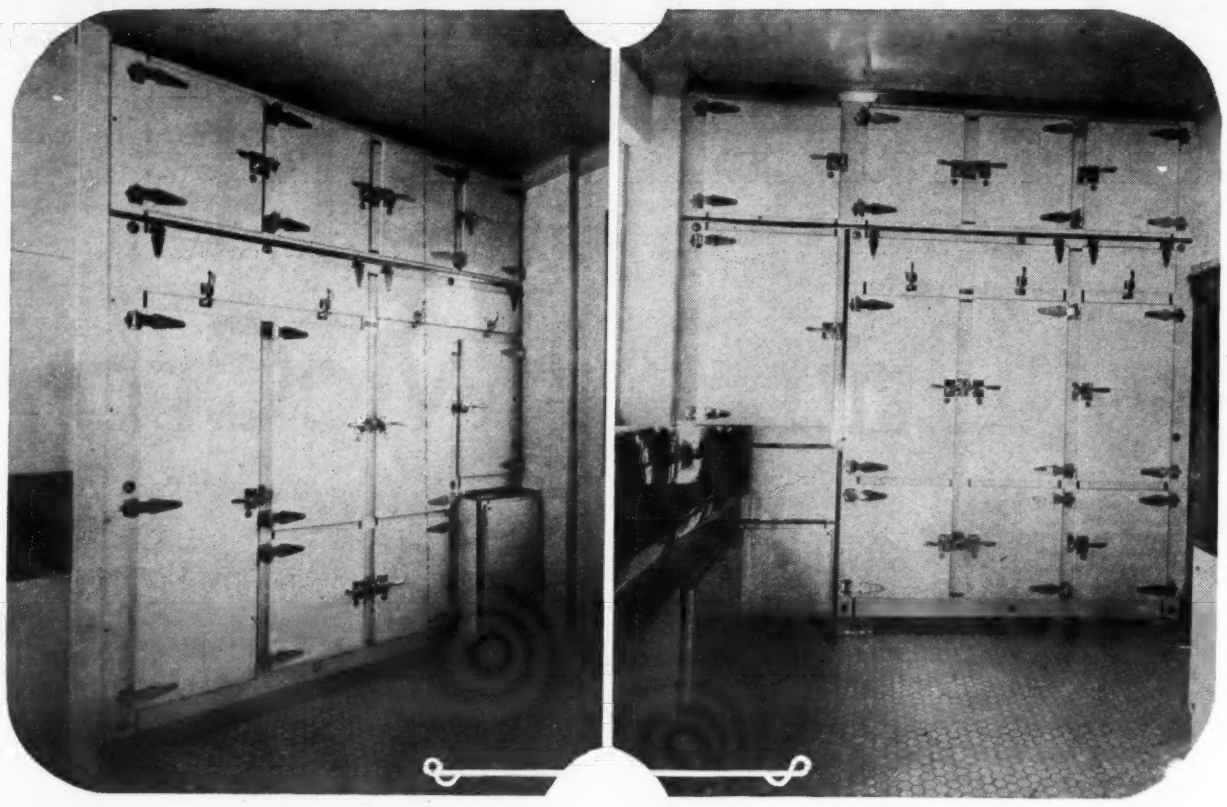
While in Toledo, Mr. Harlan talked with all Toledo district sales supervisors, who gathered here.

Ten new dealers have been appointed by the Toledo Frigidaire distributor, making a total of 98 dealers under his supervision. The new dealers are Elmore Radio Shop, Elmore, Ohio; Burk Hardware Co., Wakeman, Ohio; Weisinger & Son, Kansas, Ohio; Neikirk & Miller, Green Springs, Ohio; E. E. Mory & Son, South Milford, Ind.; August Walter, Decatur, Ind.; M. J. Trostle, Pandora, Ohio; I. W. Lutz & Son, Wabash, Ind.; Williams Electric Co., Sycamore, Ohio; and Reiff Frigidaire Co., Willard, Ohio.

UTILITY PLACES 243 UNITS IN TOLEDO APARTMENT

Toledo, O.—Toledo Edison Co. recently installed 243 Frigidaire units in the Hillcrest Arms apartments at Madison Ave. and Sixteenth St. The order is reported to be one of the largest ever placed in this district.

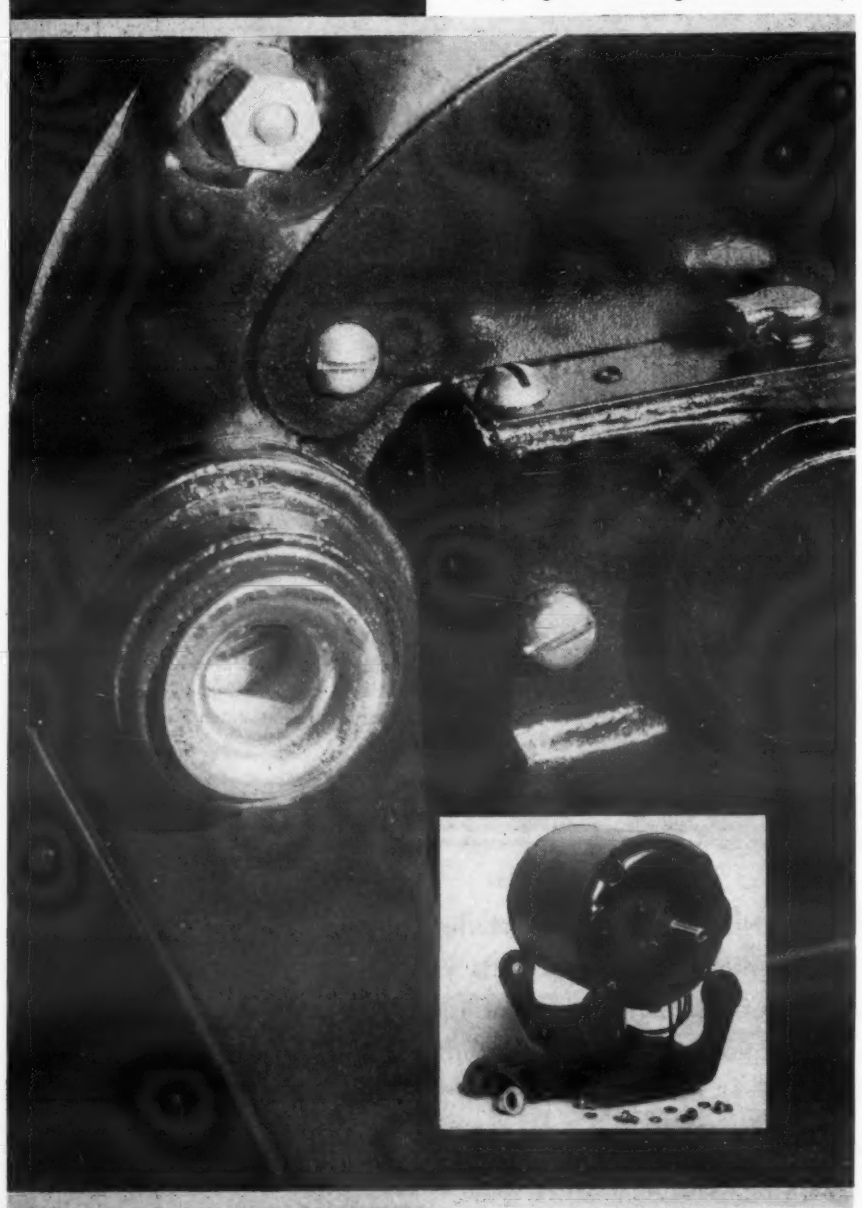
"Nice Little Cabinet Job" by Seeger for New Yorker's Roof "Bungalow"



SEEGER REFRIGERATOR COMPANY, St. Paul, Minn., have recently built and installed the cabinets illustrated here in a Roof Bungalow at 625 Park Avenue, New York City. This installation included cooling coils, ice makers and compressors built into the cabinets. Vents leading to the outside of the building cool the sound-proof compressor compartments.

A Quiet Motor

Wagner Rubber-mounted Motors are supported without a metal-to-metal contact and yet shaft alignment is not disturbed. These motors are particularly adapted to domestic refrigerators and oil burners; in fact, all applications wherever quiet starting, stopping and running are desirable and absolutely rigid mounting not necessary.



Wagner, Quality

Consult Wagner, because Wagner builds every commercial type of a.c. motor.

Literature on Request

WAGNER ELECTRIC CORPORATION

6400 Plymouth Ave., St. Louis

Sales and Service in 25 Cities

PRODUCTS . . . FANS: DESK, WALL, CEILING TRANSFORMERS: POWER, DISTRIBUTION, INSTRUMENT MOTORS: SINGLE-PHASE, POLYPHASE, DIRECT CURRENT

61-7532-2

Kelvinator Financial Statement Shows Profits Over a Million

(Continued from Page 1 Column 4)

ASSETS

	1928		1929
Current Cash	$ 230,385.97		$ 550,498.30
Receivables—less allowance for doubtful	1,306,697.90		2,433,856.95
Inventories (at cost or market, whichever lower)	3,835,036.97		4,177,346.68
Total Current	$ 5,372,120.84		$ 7,161,701.93
Investment in Subsidiaries	$ 1,866,623.35		$ 1,663,241.49
Other Assets—Elec. Ref. Bldg. Corp. Notes, etc.	3,225,023.07		2,809,728.81
Land, Bldgs. and Equipment—			
$6,132,380.94		$6,292,500.24	
Less Deprec. 1,820,117.78		2,115,076.54	
	4,312,263.16		4,177,423.70
Patents, etc.	828,032.56		821,024.27
Deferred Items—Prepaid Taxes, Insurance, Expenses, etc.	318,337.28		236,020.01
TOTAL	$15,922,400.26		$16,869,140.21

	1928		1929
LIABILITIES			
Current Payables and Accrued	$ 1,407,251.36		$ 1,165,991.82
10-yr. 6% Notes	2,698,500.00		2,528,500.00
Reserves for Contingencies	702,339.29		213,775.86
Minority Interest in Subsidiaries	5,261.87		4,828.12
Capital Stock $11,679,060.02		$12,283,770.02	
Deficit (9-30-28) 570,012.28	Surplus (9-30-29)	672,274.39	
	11,109,047.74		12,956,044.41
TOTAL	$15,922,400.26		$16,869,140.21

On September 30, 1929, the company closed its first year of operation under the management of George W. Mason, who was made president and took active charge of the business in January, 1929, and the operations since the first of February have shown a gratifying improvement, as indicated by the fact that the company has increased its sales and has ended the year with a substantial profit. The management has added to current assets an amount in excess of the total earnings. In addition, the management states that it has completely charged off all obsolete lines and during the year has followed a most conservative practice in accounting, so that the improvement in the picture has been greater than indicated by the figures. For instance, all new tools, dies, jigs, fixtures, patterns, etc., which have been added during the year have been charged to current operations, totaling $375,820.65, even though largely for use in connection with new models which are just now going into production.

The company has developed during the past six months a complete new line of all-steel ice refrigerators for Leonard division, which were announced in July, and the new Kelvinator line of commercial and domestic electric refrigerators and ice cream cabinets, shown to the public recently for the first time, and all development and engineering expense, new tools, dies, patterns, and all other expenses having to do with this 1930 line have been charged off against 1929 operations. In other words, the company starts its new fiscal year October 1, 1929, with a complete new line and all of the development, engineering and tooling expenses therefor charged off against 1929 fiscal year.

Kelvinator sales have shown a gratifying increase during the year 1929, and unit shipments for the month of October and November through November 18th show an increase of 43 per cent over the same period of 1928. Kelvinator of Canada, Ltd., which owns Kelvinator, Ltd., of England, operated at a substantial profit this year as compared with a small profit in 1928.

Kelvinator organization anticipates a considerable increase in the total business for the fiscal year ending September 30th next, basing its expectation largely upon the new developments incorporated in its three new lines of domestic electric refrigerators. Chief among these is the "Ice-O-Thermic Tubes," invented and perfected by Kelvinator engineering for faster automatic freezing; the automatic maintenance of four distinct temperatures in the same cabinet, including a compartment for cold storage, and new cabinet designs and construction. Equally advanced improvements are seen in the refrigerators for commercial use and in the new ice cream cabinets. The development of the first all-steel ice refrigerators by Leonard climaxes Leonard's forty-seven years career.

AMERICAN INSTITUTE OF REFRIGERATION OFFERS CONVENTION REPORTS

American Institute of Refrigeration, 570 Seventh Ave., New York, offers copies of the printed Proceedings of the Seventeenth Annual Convention of the American Institute of Refrigeration, held at Washington, D. C., in May, 1928, to non-members of the Institute.

The Proceedings are combined in a volume of 331 pages. Besides the reports of officers, committees and organization members, papers and discussions, it includes all the American papers presented at the Fifth International Congress of Refrigeration held in Rome, Italy, in April, 1928. Price per volume is $5.00.

CORCORAN SUCCEEDED BY CRABTREE IN NEW YORK BRANCH OF KELVINATOR

Detroit, Mich.—Several changes in Kelvinator branch organizations have been made recently. At New York, J. A. Corcoran, former advertising director of the Kelvinator Corporation, and manager of the Kelvinator branch for more than a year, has resigned to go into business for himself in another line. He has been succeeded by W. O. Crabtree, who was connected with the Kelvinator organization during 1926-27, and part of 1928, as vice-president and treasurer of the Kelvinator Sales Corporation, New York City, the New York branch. Mr. Crabtree organized the apartment house division and separated the commercial from the retail, inaugurating separate commercial and retail departments.

J. D. Cassidy, who for some time has been manager of refrigeration sales for a New England concern, returns to Kelvinator as assistant branch manager at New York.

Mr. Cassidy joined Kelvinator January 1, 1926, and was factory district sales manager in New York state and New England, outside of the metropolitan area. In March, 1927, he was transferred to the New York branch as district representative. In April, 1928, he was made assistant branch manager, the position to which he now returns.

The Dalrymple-Kelvinator Co., which for some time has had charge of sales operations in the Detroit area, which includes a number of outlying cities, has been taken over by the factory, and is now operating as the Kelvinator Sales Corporation, Detroit branch.

A. J. Goulet, who was general manager of Dalrymple-Kelvinator, has been appointed manager of the Detroit branch. Mr. Goulet has had a varied business experience in other lines. He joined Dalrymple April 1, 1927, and one month later was made general manager. He acquired an interest in the company and was made vice-president, in which capacity, and that of general manager, he functioned until the recent change.

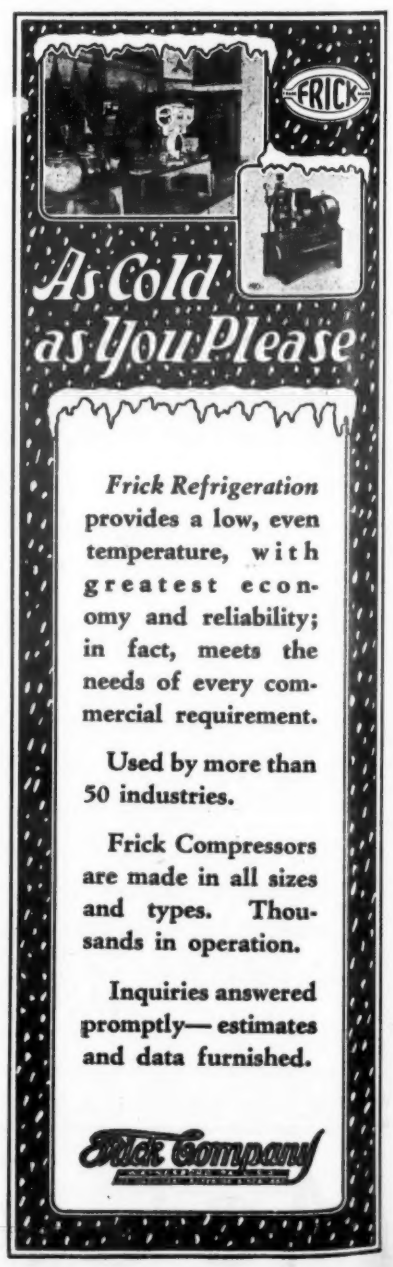
Howard Barber, who was sales manager of Dalrymple-Kelvinator, continues in that capacity with the Detroit branch. Mr. Barber is a veteran of the Kelvinator organization.

Mr. Dalrymple will devote all of his time to the management of his other business interests.

Charles V. Calkins has been appointed assistant branch manager at Philadelphia.

HOLGERSON TRANSFERRED BY FRIGIDAIRE

Ralph Holgerson, formerly commercial sales manager of Frigidaire Jacksonville, Fla., branch, is now a district manager out of the Milwaukee, Wis., Frigidaire office.


FRICK
As Cold as You Please
Frick Refrigeration provides a low, even temperature, with greatest economy and reliability; in fact, meets the needs of every commercial requirement.
Used by more than 50 industries.
Frick Compressors are made in all sizes and types. Thousands in operation.
Inquiries answered promptly— estimates and data furnished.
Frick Company

ALL AMERICA ACCLAIMS

THE NEW KELVINATORS

THE GREATEST ELECTRIC REFRIGERATORS

EVER BUILT

OPENING DAY FLASHES FROM KELVINATOR DEALERS

LITTLE ROCK, ARK.—"Sold four new Kelvinators on first day's showing."

Southern Radio & Kelvinator Co.

PITTSBURGH, PA.—"First sale for cash. Splendid attendance at showing. Public acceptance good. We believe this the finest line Kelvinator has ever built."

Kelvinator-Leonard Co.

WORCESTER, MASS.—"First sale at 10 a. m. New line enthusiastically received.

Worcester Electric Light Co.

LOS ANGELES, CAL.—"First sale De-Luxe model 22 Kelvinator to Pasadena owner. Dealer and public acceptance of new models unqualified. Wiring orders for two carloads rush shipment. Heartiest congratulations."

Collins-Kelvinator Co.

PHILADELPHIA, PA.—"The DeLuxe Model 22 caused more people to gasp and become interested in new Kelvinators than anything else. Comment of public is *'at last an automatic fast freezing device'.*"

Kelvinator-Philadelphia Co.

NEW YORK—"Excellent attendance at showing. Five immediate sales and scores of prospects which should be closed within a few days. Public very enthusiastic."

Kelvinator-Crabtree.

CINCINNATI, O.—"Very fine opening. Line very favorably received. Many good prospects for near future sales. It's a great line and we see a wonderful future for Kelvinator."

Kelvinator-Cincinnati Co.

Features Which Place KELVINATOR Years Ahead in Modern Refrigeration

1. *Ice-O-Thermic Tubes* — Giving new fast freezing of ice cubes and desserts. Fully automatic—no regulation needed. 2. *Balanced Refrigeration* — Separate temperatures for food preservation, cold storage and ice freezing. 3. *The Cold-Keeper* — Holds cold over longer periods — thus reducing operating periods of mechanical unit. 4. *Abundant Ice Supply* — Capacities up to 35 pounds of ice at a single freezing. New flexible rubber ice tray. 5. *New Metal Cabinets, Porcelain-Lined* — Will last a lifetime without deterioration. Larger models electrically lighted. 6. *Generously Powered* —Each Super-Automatic Kelvinator shows 100% over-load capacity under test in room with 100 degrees temperature.

WHEN Kelvinator, the first and greatest name in electric refrigeration, promised its distributors and dealers a product years ahead in design and performance, something distinctly unusual was looked for in modern electric refrigeration.

The fulfillment of that promise came on Saturday, November 23rd, with the nation-wide display of the new Super-Automatic Kelvinator line in Kelvinator dealers' showrooms.

Here is what thousands of visitors to Kelvinator displays found and hailed as the century's greatest development in automatic refrigeration—

An all-automatic electric refrigerator that combines three services in one: (1) the world's fastest ice-maker, (2) a cold storage plant and (3) separately controlled cold for perfect food preservation—each functioning independently of the others.

They discovered Ice-O-Thermic Tubes — a patented Kelvinator feature — that relieve users of all regulation or attention in the fast freezing of ice cubes or desserts. Faster freezing time than ever before — yet 100% automatic in operation. And they found this priceless new advantage incorporated in every one of the new Kelvinator models from the lowest to the highest priced.

They saw the finest, most durable cabinets in Kelvinator history — with all-metal construction, all-porcelain interiors, massive hardware and a host of other features rendering the new Kelvinator line as distinctively beautiful as it is unique in performance and service.

Kelvinator dealers, with one voice, say that the new Super-Automatic Kelvinators during the coming year will sell by comparison alone. And they are backing up their opinions by placing the greatest number of advance orders ever registered for a new Kelvinator model.

If you were not among the hundreds of dealers who have already inspected and enthusiastically approved these new Kelvinator models, by all means see them today. Investigation may reveal a valuable Kelvinator opportunity in your own neighborhood. Write or wire for full details of the Kelvinator franchise.

KELVINATOR CORPORATION, 14250 Plymouth Road, Detroit, Mich.

KELVINATOR OF CANADA, LIMITED, LONDON, ONT.

ONE-SEVENTH OF YEAR'S RETAIL SALES ARE MADE IN MONTH OF DECEMBER

Bloomington, Ill.—More than one-seventh of the United States' retail sales this year will be made in December. Coupled with November's, the sales will reach one-fourth of the 1929 total.

"A nationwide survey of retail stores shows the last two months of the year are the heaviest spending months," said C. U. Williams, president of the Williams Oil-O-Matic Heating Corporation. "July is the lowest, the sales this year being only 6 per cent of the 1929 total. December's will be 15 per cent. November's were 10 per cent.

"By coincidence, people are most able to buy just when the holiday spirit makes them most willing to buy. Crop and cattle sales are large in the fall, producing income for farmers just in advance of the Christmas season. Salesmen by hundreds of thousands who net extra profits in the fall have the money available for Christmas buying. Bonus distribution reaches its peak."

NEW YORK POWER & LIGHT GETS CONTRACT

Albany, N. Y.—Contract has been awarded to the New York Power and Light Corporation, 124 State Street, for refrigeration equipment to be installed in the main animal unit, Division of Laboratories and Research, at Guilderland, New York. Bids were received by the Commissioner of Health of the state of New York on two proposals. The contract covers proposal No. 1 at $6,600.00.

Wisconsin Servel Men Meet to Discuss Commercial Sales and Service

THIRTY-TWO sales and service representatives from eight properties of the Wisconsin Valley Electric Company attended the Servel Commercial Sales & Service Conference recently at Wausau, Wis.

The meeting was arranged by E. H. Evans, commercial sales manager of the Wisconsin Valley Electric Co., and assisted by George M. Kammerer. It was conducted by Carl Conkey, E. H. Culver and W. G. Stevens, of the Servel Sales Department, and R. C. Ryan, Servel district service manager.

The following Wisconsin Valley men attended:

Harold Grenson, A. Pepper, V. Eminch, Wm. Levandoski, service manager; Herman Rakow, Geo. M. Kammerer, C. H. Nequitte, M. H. Heise, F. H. Evans, A. R. Kuhn and S. F. Morrison, all of Wausau, Wis.

Wm. Grueber, Chas. DeCanter and Ansel P. Gilbertson, of Rhinelander, Wis.

Peter Meronek, A. H. Treutel, J. Wonkovich and E. J. Mears, of Stevens Point, Wis.

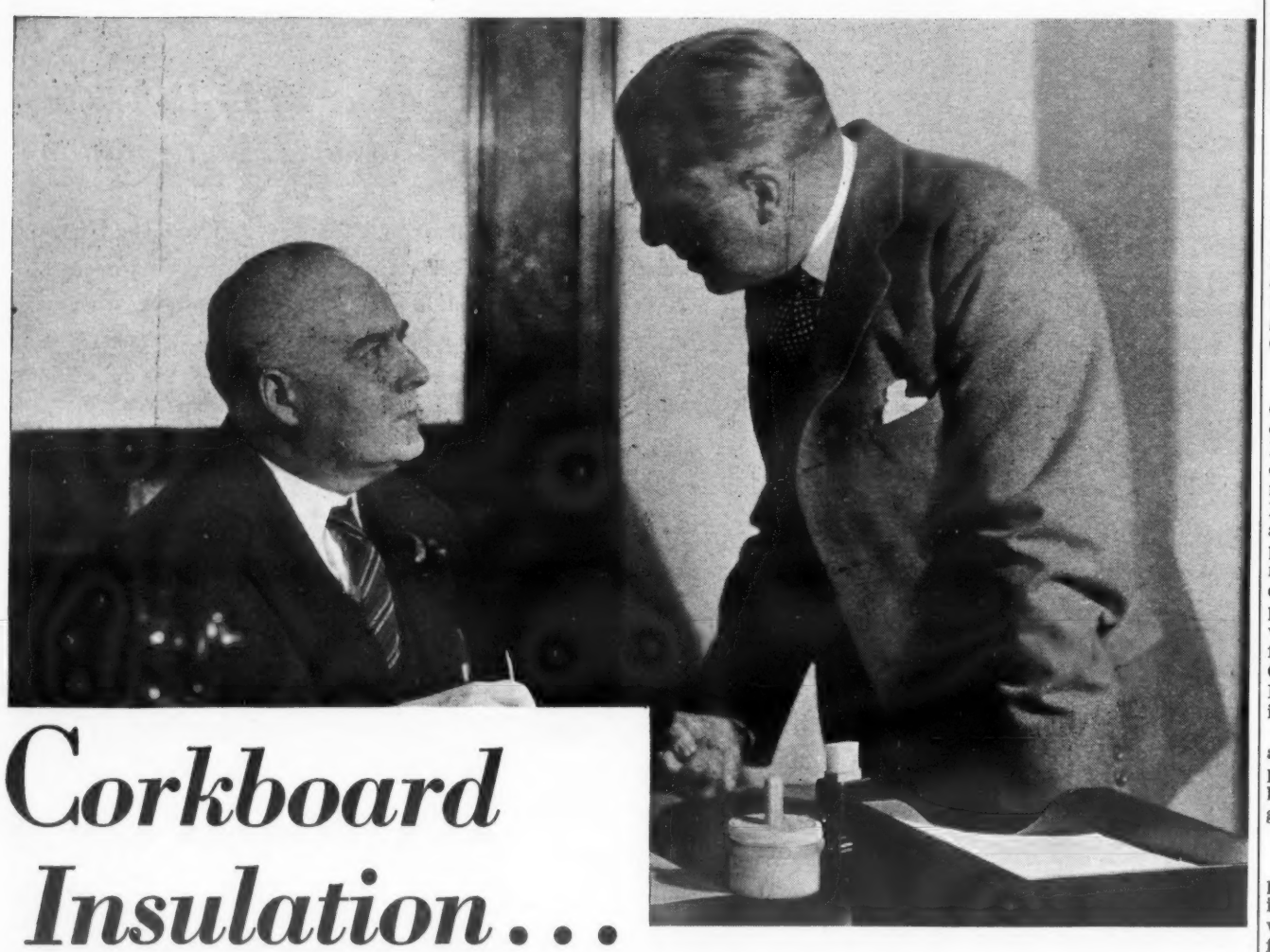
Carl J. Conkey and W. G. Stevens, of Chicago, Ill.; Geo. M. Gambo and D. Shaney, of Tomohawk, Wis.

A. O. Tholl, L. C. Hackbarth, O. F. Kinegar, S. A. Koebler and G. J. Thill, of Merrill, Wis.

Harry Zeircky, Robt. Offerdahl, Art. L. White and H. C. Canfield, of Antigo, Wis.

Pat Eagan, Mosinee, Wis.

E. H. Culver, Evansville, Ind.; Paul Williams, Waupaca, Wis.; H. L. Rifleman, Minocqua, Wis.



Corkboard Insulation...

that's our strongest selling point!

"THE more we talk corkboard insulation the more sales we'll make. It's a background for all we say.

"A beautiful cabinet isn't a refrigerator if it leaks heat. A powerful refrigerating unit is helpless if it has to cool off the whole kitchen. It has to have good insulation to do its duty well.

"And good insulation means—corkboard insulation. That's our basis for sales talk about *quality*.

"Perfect food preservation . . . faster freezing . . . low operating cost . . . constant temperature . . . long life . . . all are largely dependent on insulation. They are assured permanently with corkboard.

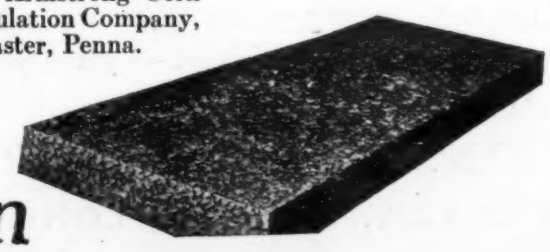
"Let's say so in every sales talk. Tell the prospect the plain facts about insulation: That corkboard is standard insulation today in all commercial cold storage construction. How every other insulation has failed because of moisture absorption, and corkboard alone has stood the test. That's not a 'claim'; it's proof.

"A person who knows the facts would pay double for corkboard insulation. Yet this quality insulation only costs a few cents more than substitutes."

* * * * *

More and more, straight-thinking, straight-talking salesmen like this man are boosting sales for refrigerators lined with Armstrong's Corkboard.

For full information, write Armstrong Cork & Insulation Company, Lancaster, Penna.



Armstrong's Corkboard Insulation

Moisture Proof Insulation for Refrigerators

NUMEROUS MEETINGS OF KELVINATOR DEALERS TO PLAN CAMPAIGN FOR 1930

Detroit, Mich.—Kelvinator dealers throughout the country have been holding conventions at which the new 1930 models featuring "Ice-O-Thermic" tubes are being shown. Sales and advertising plans for the current year are being announced and explained by representatives from factory and distributor organizations. The 1930 models are being discussed and explained to the dealers.

Philadelphia, Pa.—Kelvinator-Philadelphia presented the new line to a large delegation of dealers, Nov. 1. George W. Moister, manager of the branch, welcomed the delegates and described the new products. He was followed by Maurice P. Webb, domestic sales manager, who outlined the 1930 advertising program. J. D. Delaney, general sales manager, discussed the commercial equipment available. The Kelvinator play, "Following Through," was staged with a cast headed by Richard Owen from the factory. Dr. Franklin R. Crawl, of the Philadelphia Public Ledger, elaborated on the merchandising possibilities in that territory.

At the banquet C. V. Calkins, newly-appointed assistant branch manager, presided as toastmaster. Godfrey Strelinger, manager of Kelvinator branches, gave the principal talk at this session.

Boston, Mass.—The Kelvinator Corporation of New England held a meeting recently at the Hotel Kenmore at which 200 salesmen were in attendance for the purpose of viewing the new 1930 Kelvinators.

Harry Troutwine, Boston manager, described the new features embodied in the 1930 Kelvinator models and reviewed the progress made in Boston during the past year. In November, he declared, orders had already reached a figure that more than doubled the number of orders received in November, 1928. The new Kelvinators feature "Ice-O-Thermic Tubes," for freezing ice cubes in a very short time.

The evening was also given over to a general sales discussion, during which plans were formulated and advertising wrinkles introduced. Other speakers of the evening included J. S. Sayre, Kelvinator sales manager; Godfrey Strelinger, manager of branches; and Arden Yinkey, vice-president of MacManus, Inc., all from Detroit.

Minneapolis, Minn.—Kelvinator salesmen of Northern States Power Co. were first in the field to celebrate officially the announcement of the 1930 Kelvinator line. They gathered at the Nicollet Hotel and held sessions Nov. 1-3. S. S. Shaver, manager of the Kelvinator department, acted as chairman of the meetings and as toastmaster at the banquet held Friday night, Nov. 1.

The Friday program consisted of speeches by the following men: William C. Stephenson, special representative, "History of Kelvinator"; S. S. Shaver, "New Kelvinator Cabinets"; H. A. Dahl, district manager, "New Ice-O-Thermic Tubes"; H. C. Loomis, "Temperatures and a Cold Storage Compartment"; H. G. Huey, "Remarks in General." A banquet followed this program. Friday evening Mr. Dahl spoke on "1930 Advertising Program" and used slides to show the new Kelvinator; Mr. Stephenson discussed "The Human Side of Selling Yourself," and Mr. Shaver talked on the "1930 Set-up and the Salesman's Opportunity." Saturday morning program consisted of an open session.

Elmira, N. Y.—Kelvinator dealers were entertained by the Rochester Electrical Supply Company and its branches, the Elmira Electrical Supply Co. and the Jamestown Electrical Supply Co., at the Mark Twain Hotel, Nov. 13.

The toastmaster was F. L. Walton, vice-president, Rochester Electrical Supply Company. R. J. Petrie, Kelvinator district manager, talked on the subject of "Domestic Kelvinators." J. M. Fernald, Kelvinator commercial sales manager, discussed commercial matters. Others in attendance were D. Simpson, manager, Kelvinator department; I. Brady, commercial sales; M. H. Tickell, sales representative, all of Rochester Electrical Supply Co.; H. J. Lohrman, sales representative, Jamestown Electrical Supply Co., and H. P. Brill, manager, and D. J. Byrne, sales representative of the Elmira Electrical Supply Company.

Burlington, Vt.—The second annual meeting of G. S. Blodgett Co., Inc., Kelvinator distributors, Nov. 15, had 35 dealers in attendance. An instructive program was arranged, with the new Kelvinator line the main subject. L. L. Langley, Kelvinator district manager, attended the meeting, which was closed with a banquet at the Hotel Vermont.

Green Bay, Wis.—Kelvinator men viewed the new models at a dealers' meeting held here by Bay Appliance Co., Kelvinator distributors. H. A. Dahl, special representative, was present and described the new line to the assembled Kelvinator men.

Jacksonville, Fla.—Twenty-five Kelvinator dealers, representing many Florida communities, were present at a meeting held Nov. 20 at the display rooms of Kelvinator-Kimmel, Inc., Kelvinator distributors for Florida. Talks were made by Thomas P. Hallock, southeastern Kelvinator district manager, and B. A. Brandon, special Kelvinator commercial sales representative.

Peoria, Ill.—More than fifty Kelvinator dealers representing the Washington Auto Supply Co., Kelvinator distributors, attended a one-day meeting at Jefferson Hotel in Peoria, Ill., Nov. 18. Speakers were George Rinkenberger, president of the company; Fred Foersterling, Kelvinator district manager; Scott Silliman, of Kelvinator factory. Dealers were in attendance from Quincy, Decatur, Champaign, Danville, Streator, Ottawa, LaSalle, Bloomington and other points.

Little Rock, Ark.—A well attended convention was held here Nov. 20-21 at which the Southern Radio and Equipment Co., Kelvinator distributors, were hosts. The new line was exhibited at the Albert Pike Hotel, where a banquet was given, at which George B. Gray, manager of the company, presided. Attending from Detroit were J. M. Fernald, Kelvinator commercial sales manager, who discussed the new line, and Charlie J. Baker, of MacManus, Inc., who outlined 1930 advertising plans.

Kansas City, Mo.—G. W. Mason, president of Kelvinator Corp., Detroit, Mich., and H. W. Burritt, vice-president in charge of sales, recently visited Western Kelvinator Co. as a part of an extensive on-the-spot survey of Kelvinator business and of business conditions in general. The two men are covering territory between Detroit and the Pacific Coast.

MASON ANSWERS MONITOR ON BUSINESS OUTLOOK

Boston, Mass.—G. W. Mason, president of the Kelvinator Corporation, wires to the *Christian Science Monitor* of Boston that his company has received no cancellations from distributors or dealers in any part of the country on account of the recent stock market crash. "Our shipments for October and November to date are 43 per cent ahead of last year," he says. "Current orders are running fifty per cent ahead of last year. We feel that readjustment in security prices will not seriously affect our business. I have just returned from a five weeks' trip to the coast, covering all Pacific Coast cities as well as the Southwest, including Texas, Oklahoma and Missouri. As a result of a careful check of our outlets in these territories, we will not change our quota allotments in our budgets for these particular territories. These markets apparently contain very few speculators in stocks."

The *Monitor* sent out something like twelve thousand telegrams to business concerns and manufacturing companies all over the country since the big market breaks, querying them as to business conditions and the possible effect of the stock market situation on their business.

Canadian Kelvinator Dealers Hold Annual Convention

CANADIAN dealers, some of whom journeyed from as far east as Sydney, Nova Scotia, and as far west as Victoria, B. C., to attend the two-day Kelvinator convention, which was held at London, Ontario, Canada, Oct. 29-30. Some 200 delegates, representing every principal city in Canada, attended the convention. F. S. McNeal, general manager of Canada Kelvinator, Ltd., acted as chairman of the various meetings.

OMAHA G. E. DISTRIBUTOR GETS LARGER TERRITORY

Omaha, Nebr.—Storz Electric Refrigeration Company, with Arthur C. Storz, president, and E. J. Nellor, general manager, has entered the Kansas and Missouri field through the purchase of a franchise for St. Joseph, Mo., district. The city of St. Joseph, eight counties in northeastern Kansas, and eighteen counties in northwestern Missouri are included in the new territory.

Previous to this new deal the company carried all of Nebraska and the western third of Iowa. Business was conducted in a small room on Farnam Street, possibly 25 x 60 feet, the first year. Last May the company moved to the ground floor in the Masonic Temple building at Eighteenth and Douglas streets. Over $10,000 was spent at that time in fitting up offices and remodeling the room for a show place. The icicle room in the basement costs well over $1,000 and is one having no income at all, as the company donates it for the use of meetings of various ladies' clubs. The good-will built by this is considered one of the best advertising methods used by the company.

The Storz Electric Refrigeration Company of Omaha now controls the distribution of General Electric refrigerators in all the territory named above. The general offices will be retained here, with selling agencies in Sioux City, Ia.; Lincoln, Nebr., and St. Joseph, Mo. W. A. Davies is the city sales manager for Omaha, while Sandy Taber, of the Iowa-Nebraska Light and Power Company, holds that position for Lincoln and South Platte district of the state.

MURRAY HEADS UTILITY'S TOPNOTCHERS' CLUB

New York, N. Y.—The month of September marked the inauguration of the Topnotchers' Club, an organization composed of the merchandise salesmen who score the highest amount of appliance sales during each month in the subsidiary properties of the National Electric Power Co. By virtue of his position, the salesman showing the highest record of sales each month automatically will be elected president of the club and will retain the office as long as his sales remain highest in the entire group.

President of the club for September was H. D. Murray, in charge of Kelvinator sales for the Penn Central Light and Power Co., whose sales were $5,952.50, topping 21 competitors for the honor.

WESTERN RADIO BECOMES KELVINATOR DISTRIBUTOR

Kansas City, Mo.—Western Radio Co., formerly Copeland distributors, has taken over the distributorship of Kelvinator for western Missouri and Kansas. A division of the Western Radio Company, the distributing organization, will be known as the Western Kelvinator Company. Kansas City Power and Light Co. is the local retailer for Kelvinator.

W. I. Taylor is the retail sales manager of the Western Kelvinator Co., and John B. Taylor is in charge of wholesale distribution. C. E. Wight is manager of the resale department. The wholesale and retail departments will be distinctly separate.

FERRO MEN TO INSPECT ENAMELING PLANTS

Cleveland, O.—A combined convention of Ferro sales and service men will be held at the offices of Ferro Enamel Supply Co., Dec. 16 to 21. During the week a trip will be made to various enameling plants located in Cleveland, Canton and Salem, Ohio, and other points. The Ferro organization is now comprised of more than fifty sales and service representatives.

G. E. EQUIPS HIGH SCHOOL

Montgomery, Ala.—The new million-dollar Sidney Lanier high school, South Court St., now has its cafeteria and dining room equipped with General Electric refrigerators.

The installation was made by Alabama Power Co. and consisted of one model P L-17, one P L-13 and one P L-96.

JONES-CORNETT CLOSE HOSPITAL CONTRACT

Welch, W. Va.—Jones-Cornett Electric Co. report that Kelvinator electric refrigeration will be installed in the new Stevens Clinic Hospital, now being erected here. The equipment contracted for includes water cooler drinking fountains on each floor, an ice making machine, a large kitchen refrigerator, and Kelvinators for the three diet kitchens. All this equipment will be of the new type just announced. Work of installation is now in progress.

U. S. DEPT. OF STATE ISSUES FOREIGN SERVICE LIST

Foreign Service List, Publication No. 4, of Department of State, issued Oct. 1, 1929, contains a list of officers in foreign service of the United States, Foreign Service officers on detail as inspectors, Foreign Service officers assigned to Consular Districts, Supervisory Consular Offices, and the limits of their jurisdiction, tariff of United States Consular fees, and other data. This publication is for sale by Superintendent of Documents, Washington, D. C.

Bid for Christmas business

...Set new profit records

WITH WILLIAMS NEW

ICE-O-MATIC JUNIOR!

$175 *and up*
f. o. b. factory

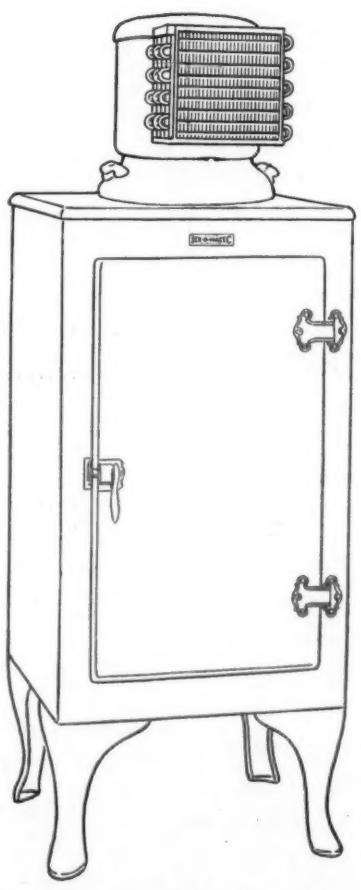
INCREASED MARKET SCOPE ... LIVE DEMAND

Almost every home not equipped with electrical refrigeration now becomes a "prospect" for Williams Ice-O-Matic Junior!

Purchasers will choose Williams Ice-O-Matic Junior for its important improvements and exclusive advantages. Its low price adds thousands of modest homes to your prospect list—families interested in electric refrigeration for the first time.

You may specialize in small apartment business, for Williams Ice-O-Matic Junior fits small and difficult spaces. The mechanical unit may be placed in different positions. This Ice-O-Matic Junior feature, with silent operation, will bring you many sales.

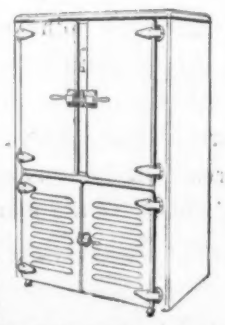
Williams Ice-O-Matic Junior is a development of Ice-O-Matic Refrigeration—unique, and different from any other refrigerator on the market. Begin to profit now from this unmatched achievement in finer refrigeration—at lowered cost!



Unit may be mounted on top, at side, installed in basement, or placed inside cabinet in model not shown. For small homes and apartments.

Only
WILLIAMS
ICE-O-MATIC JUNIOR
Offers these vital advantages
... at $175

Powerful Cooling Capacity—holds temperature in chilling chamber between 40 and 45 degrees, uniformly.
Silent Operation.
Ice-O-Matic Visible Temperature Control, for fast freezing.
Diminished Operating Cost.
Lifetime, Trouble-free Service.
Cabinets of Enduring Beauty, with new conveniences.



Williams Ice-O-Matic line includes this Benjamin Crysteel Cabinet, in five sizes with Williams Ice-O-Matic larger unit enclosed in the cabinet or installed in the basement.

WILLIAMS OIL-O-MATIC HEATING CORPORATION
Bloomington, Illinois

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Refrigeration Industry

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Bridges to Build

A STORY is told of an engineer who gained fame in Europe as a builder of railroads. Coming to America, he sought a market for his skill and was commissioned to build a road across the western prairie. After traveling a hundred miles over the flat land, he exclaimed in despair: "I cannot build a railroad here. There is no place to put the tunnels or bridges."

Only a few months ago another, and more famous, engineer accepted an assignment for which he was also eminently fitted by training and experience—the presidency of the United States. In his characteristic manner he immediately tackled the few outstanding problems left over by an administration during which unprecedented prosperity had prevailed. But, with these matters in hand, how could the man apply his unlimited energy?

Then came the stock market crash, providing Hoover with a job of the first magnitude. As usual, he was ready with plans to meet the situation—plans which he had carefully formulated years ago for just such an emergency. For soon after he became Secretary of Commerce, he laid down the theory of large-scale public construction as a means of offsetting depressions in the normal business cycle. But not until the long-delayed slump arrived did he have a chance to "build the bridges and dig the tunnels" for his project.

It is notable that Hoover has seldom been in the headlines except when there was a crisis of some kind. Without problems to solve, people to feed, floods to control, unusual difficulties to reckon with, we might never have heard of his ideas for constructive peace-time development.

Not alone for Hoover, but for all who have a desire to serve and a will to accomplish, disturbed conditions of any kind always spell opportunity. When people are satisfied, when everything is organized and running smoothly, the man of unusual ability is somewhat handicapped. Unless there is a hard job to do—a test of skill—rewards may go to the favored or incompetent.

During the past few years, since electric refrigeration has been in the spotlight of public attention, it has attracted many well trained and ambitious men seeking a new and broader field of service. The industry also collected the usual quota of individuals who were merely hoping to find an easy way to wealth. Both types are opportunists and in fair weather it is difficult to distinguish between the two. In time of storm, however, the man who knows his business is soon quickly recognized.

The indications are that 1930 will be a big test year for companies, equipment and men. Many of the manufacturers have increased their production facilities to the point where the total output next year will probably be well over a million units. There will be keen competition for leadership, with the odds favoring those who offer the best value for the consumer's dollar. The public has sensed that there is an appreciable difference in the service, safety and reliability of the various types of equipment on the market. This will tend to place a new value on quality and will help eliminate the dead level of price competition.

Affairs within the industry have revealed the weakness which results from lack of co-operation, both nationally and locally. The continuation of this condition reflects no great credit on responsible executives. There is a need for men who will accept, rather than evade, the opportunities which go hand in hand with these trying problems.

Nineteen-thirty, we predict, will be a year in which many qualified men will emerge out of the ranks. There are "bridges to build" over gaps of misunderstanding in the industry. There are "tunnels to dig" through the obstacles of sales resistance. Nineteen-thirty beckons those who have the spirit of adventure and the willingness to work.

Armstrong Units in Portland Florist Shop

TOMMY LUKE'S new florist shop in Portland, Ore., is equipped with two refrigerators designed by L. F. Marsh, Armstrong engineer in Portland, and manufactured by Armstrong Co., Spokane. A display case in the sales department, with the front and ends finished in black and green plate glass and vitrolite, occupies an entire side of the room. The coils in the display case are overhead and concealed by a bunker; the second refrigerator in the basement is used for the storage of flowers. Both units are cooled by a one horsepower compressor.

READER QUESTIONS VALUE OF LOAD FACTORS FOR BOX COMPUTATIONS

Titusville, Pa.
Dec. 1, 1929.

Electric Refrigeration News,
Detroit, Mich.

With great interest have I read the various articles in your paper dealing with the computation of commercial boxes. No doubt there is a demand for simplified methods, and a study of this problem would be of great interest to the industry, inasmuch as a number of failures may be traced back to improper care of this end of the sales problem. Better methods would undoubtedly help to build up a solid confidence in mechanical refrigeration. To this end I would point out that the method of using a load factor, which seems to be universal in today's engineering, is far from being an ideal method.

As an example, I will refer to the Welsbach tables as published in last issue of your paper. These tables, although very ably employing the graphic multiplication method, employ the load factor principle, the confusion of which will be illustrated in the following two sample problems:

Box No. 1

Surface.....320 sq. ft.
Load factor (grocer).....2
Insulation...1 in. cork sheathed in wood
Temperature difference.....35° F.

Box No. 2

Surface.....Same as in Box No. 1
Load (grocer).....same load as in Box No. 1, but a different load factor, as will be explained.
Insulation...4 in. cork sheathed in wood
Temperature difference.....Same as in Box No. 1

The two boxes and service on them are identical, with the only exception that Box No. 2 has 4 inches of cork, whereas Box No. 1 has 1 inch of cork only.

From the Welsbach tables we now find that Box No. 1 requires 80,000 B. t. u. per day, and as the load factor is taken as 2, this will be understood as 40,000 B. t. u. for heat leakage and 40,000 B. t. u. for service.

It is now obvious that the second box uses less B. t. u. for heat leakage but the same amount for service, as the insulation is better, but the service is same as in Box No. 1, and, consequently, this same service cannot be expressed by the same load factor of 2 that pertains to an identical service on Box No. 1.

For the further analysis of this we can find the heat leakage on Box No. 2, by using a load factor of 1, in the Welsbach tables gives a consumption of about 16,000 B. t. u. for heat leakage per day.

The service is the same as in Box No. 1, consequently 40,000 B. t. u. are required to take care of this, or a total of 56,000 B. t. u. is required for the box, which is three and one-half times as much as the heat leakage of the box, so that the load factor in this case would be three and one-half instead of 2.

Thus the identical services on the two boxes give load factors that are widely different. So much so that it would, in practice, upset the reliability of the computation, which is much confusing to the salesman. He is inclined to base his load factor on the amount of food handled in a box of a certain size, rather than figuring out the B. t. u. required for heat leakage and for service separately, which seems to be the only reliable method to find the correct factor—at least without giving an easier and at the same time dependable method of finding this factor. It seems to be rather a confusing one to the salesman unless he is a well-trained engineer, in which case he would find the heat leakage and the service separately and add them up so that in his calculation of the load factor would be superfluous.

It is often a practice to give, for instance, all grocers the same load factor, all butchers another, and so on. But this is also far from ideal, as the load in two butchers' boxes may be entirely different based on the volume of the box. Even if it was the same, based on size, the difference in the quality of insulation may account for errors as great as shown above.

It would be very interesting to have this problem commented on by some of your readers, who might finally lead to a simpler and better method of determining box requirements.

HOLGER NIELSEN.

Why Some Men Succeed While Others Fail

"I have often thought that if ten men of average intelligence were sitting at their desks, and each of them was asked to write down the attributes of success, possibly all of them would write about the same thing—integrity, energy, courage, courtesy, service, etc. If these common attributes are so well known, why is it then, that so few men succeed? There may be many answers to this question, but I believe that it is not because we do not know the things that make for success; but, knowing them, we do not have the courage and strength and determination to stick to them after we have written them down."—Frank C. Rand, president, International Shoe Co., St. Louis, Mo., in an address to the Mississippi Valley Manufacturers' and Wholesalers' Conference.

ICE ASSOCIATION BACKS MOVEMENT FOR BETTER REFRIGERATORS

POSSIBLY with the single exception of ice deliveries there is no subject so much in the mind of the ice man at the present time as that relative to the sale of refrigerators. During the past two or three years, there has been an increasing number in the industry who have come to the realization that refrigerators are an integral part of the ice man's business and should therefore receive paramount consideration when the question of their sale is discussed.

The extent to which the sale is being carried on by the industry is indicated in a recent statement that of the membership of the Louisiana Ice Manufacturers' Association, seventy-five per cent were selling refrigerators, and that indications were favorable as to the others falling in line within a very short time.

From the point of view of those ice men who are desirous of very close cooperation with retail stores selling refrigerators, there is a distinct evidence of a forward movement in the recommendations of the Refrigerator Merchandising Committee of the National Retail Furniture Association, which expressed the hope that not only standards of construction but also standards of performance of refrigerators may be worked out and labeled in a uniform way to assist the public in recognizing the evidence of reliability, and that dealers keep in close touch with local ice companies. The committee further recommended that for National Refrigerator Month in 1930 a more ambitious program be prepared.

Nothing on the part of the housewife will be such a powerful answer to the entreaties of the mechanical unit salesman as a good, reliable ice refrigerator. It is, therefore, a matter of the utmost importance that the ice merchant should either be able to furnish such himself or see to it that the retail stores effect the sale of those who will not, even partially, fail of their purpose.—*Merchandising Ice*—October, 1929.

"Permit me to compliment you on the excellence of the publication which you are putting out. I believe it is the most valuable contribution to the industry that has yet been made."—P. G. Young, Little Rock, Ark.

CORRECTION

The NEWS was in error in reporting on page 10 of the November 20, 1929, issue, that the Refrigeration Code of the city of Los Angeles, California, bars the use of the multiple system. It develops that the two sections published were part of a *proposed* code, now being considered by the city of Los Angeles, but not now in force or effect.

SELLS 227 PER CENT OF QUOTA TO LEAD SOUTHERN DEALERS

El Paso, Texas—Because El Paso Electric Co. had the best sales record of some 1,525 Kelvinator dealers and distributors in the Southern area and sold 227 per cent of its quota during the fiscal year which ended September 30, 1929, it received a gold loving cup from Kelvinator Corp., Detroit, Mich., at a banquet tendered members of the sales department, November 9, in Hotel del Norte.

Presentation of this District Manager's cup was made by G. W. Mason, president of Kelvinator Corp., to F. J. Gannon, manager of El Paso Electric Co. Mr. Gannon, in accepting the trophy, expressed his gratitude to those responsible for the record.

J. H. Warden, sales manager of El Paso Electric Co., acted as toastmaster at the banquet. He read a number of congratulatory telegrams, and then called upon W. R. Bell, general superintendent of Light and Power Department; J. S. Cortines, district manager of Kelvinator Corp., and H. W. Burritt, vice-president in charge of sales, Kelvinator Corp., for short talks. Mr. Bell responded by saying that as general superintendent of light and power, he had a direct interest in results obtained and that he derived great personal satisfaction from analyzing the record. Mr. Cortines explained the method used in arriving at a basis for the award, quoting figures to show the significance of the selling accomplishment. He cited, as an example, the record of another Southwest dealer operating in a territory comparable to that served by the El Paso Eelctric Co. and showed that Kelvinator sales per 1,000 meters connected to the line, exceeded those of the company used for comparison about 3 to 1. This he offered as evidence that sales efforts were backed up by effective advertising and good service. Mr. Burritt confirmed statements of the company's outstanding sales, and expressed his gratification at results obtained. He said that while Kelvinator improvements made during the year have influenced a continued good demand, and resulted in a large volume of sales generally, he was convinced that sales results of the El Paso Electric Co. were exceptional and were brought about by merchandising methods far in advance of those ordinarily used.

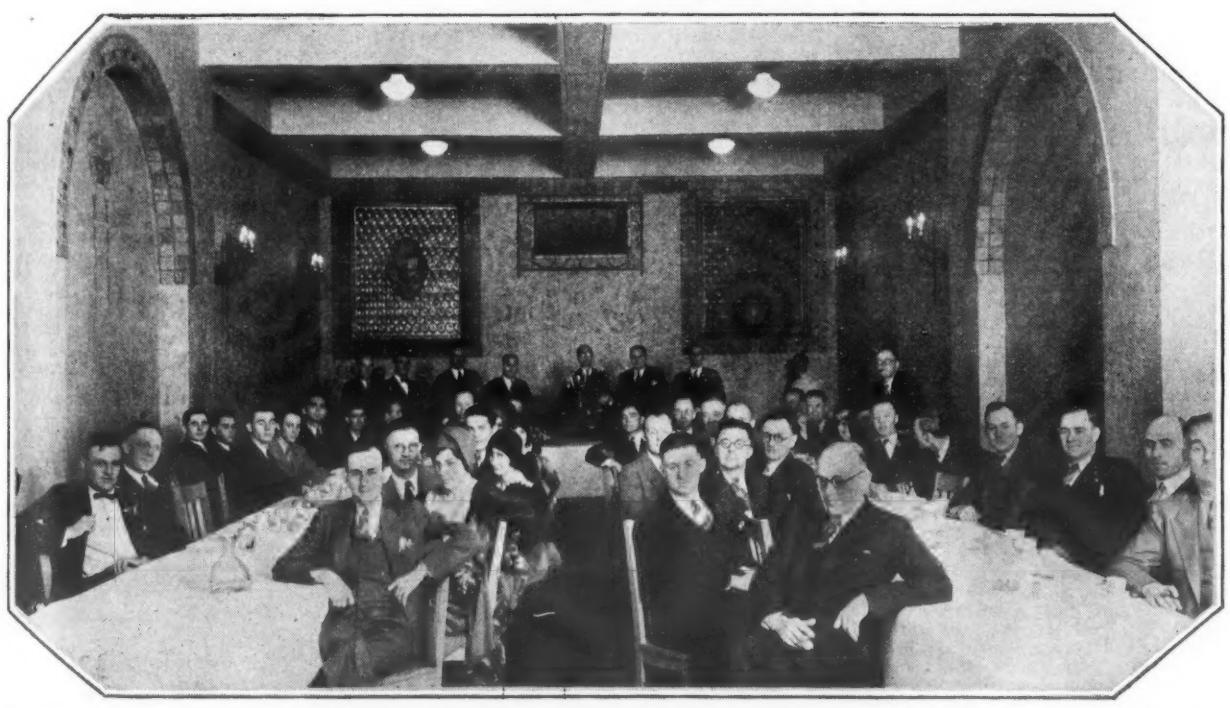
Mr. Mason said that while a complete check has not yet been made, he felt perfectly safe in saying that Kelvinator sales made by El Paso Electric Co. during the year will compare favorably with those of any of the dealers throughout the United States, as well as those in some 60 foreign countries.

Mr. Mason and Mr. Burritt, who were making an extensive on-the-spot survey of the Kelvinator business and of business conditions in general, covering the entire country, made a special trip to El Paso via airplane to present the loving cup. Both executives expressed an optimistic view regarding the future of electric refrigeration, and said they found elsewhere, as in El Paso, that the trend in the industry is away from seasonal demand. The National Food Preservation Campaign in September helped sales and it is believed that more and more people are coming to recognize in electric refrigeration a year 'round necessity.

Awarding District Manager's Cup

George W. Mason, Kelvinator president, awarding District Manager's cup to F. J. Gannon, manager of El Paso Electric Co., for outstanding sales effort.

Kelvinator Honors El Paso Organization of "Quota Busters"



Members of the El Paso Electric Co. sales force were guests at the banquet at which Kelvinator officials honored the organization for selling 227 per cent of its quota.

RURAL ENGINEERS WILL DISCUSS REFRIGERATION IN AGRICULTURAL FIELD

Chicago, Ill.—The Rural Electric Division of the American Society of Agricultural Engineers will meet at Hotel Sherman, December 4-5.

Application of electric refrigeration to the agricultural field will be covered in speeches by H. W. Allyn, superintendent, Rock River Farms, Ill., on "The Place of Electric Power in the Production of High Grade Milk;" A. W. Farrall, development engineer, Douthitt Engineering Co., and J. H. Godfrey, director of research, Creamery Package Mfg. Co., on "Recent Developments in Small Dairy Equipment for Electric Power Application;" and William H. Lapp, director, Poultry Research Society of America, on "Electrical Refrigeration of Poultry Products."

The remainder of the program will consist of the following speeches:

"Value of High Grade Milk," by W. D. Dotterrer, director of laboratories, Bowman Dairy.

"The Use of Electric Power for Ventilating Stables," by J. L. Strahan, agricultural engineer, Louden Machinery Co.

"Experiences with Dairy Equipment in Rural Electric Service Work," by E. R. Meacham, manager, rural service department, Wisconsin Power & Light Co.; Richard Boonstra, agricultural engineer, Public Service Co. of Northern Illinois; H. S. Hinrichs, rural service engineer, Kansas Power & Light Co.; E. C. Easter, agricultural engineer, Alabama Power Co., and C. P. Wagner, rural service engineer, Northern States Power Co.

"Developments in Electric Incubation and Brooding," by J. C. Scott, agriculturist, Puget Sound Power & Light Co.; H. J. Gallagher, rural electric engineer, Michigan State College; T. E. Hienton, project leader in rural electrification, Purdue University, and G. W. Kable, director, National Rural Electric Project.

"Value of Processing Livestock Feeds," by C. W. McCampbell, professor of animal husbandry, Kansas State Agricultural College; J. H. Hilton, assistant professor of dairy husbandry, Purdue University, and L. E. Card, professor of poultry husbandry, University of Illinois.

"Experience in Feed Grinding for Large-Scale Beef Production," by Harry Hopley, Iowa farmer.

"Economic Limit of Small Grinding Plants for Electric Motor Drive," by F. J. Zink, agricultural engineer, Westinghouse Electric & Mfg. Co.

"A Small Electric-Power Grinding and Mixing Plant," by J. E. Nicholas, research engineer, Pennsylvania State College.

"Results of Tests of Small Electric-Drive Grinders," by F. W. Duffee, associate professor of agricultural engineering, University of Wisconsin, and E. B. Lewis, agricultural engineer, University of Nebraska.

"Underground Wiring for Farm Electrical Installations," by H. H. Weber, engineer, Rome Wire Co.

"Results of Experiments with an Electric Hotbed," by R. R. Parks, agricultural engineer, University of Missouri.

"Developments on the Rural Electrification Projects," a discussion by project leaders, led by G. W. Kable, director, National Rural Electric Project.

A business session, Thursday afternoon, December 5, will close the program.

UNIVERSAL COOLER NAMES NEW DISTRIBUTORS

Detroit, Mich.—Midwest Engineering & Equipment Co., Chicago, Ill.; Hungerford Bros., Inc., New Haven, Conn.; Twin Electrics Co., Boston, Mass.; A. T. Gruenberg Electric Co., New York, N. Y.; Valley Sales & Service Co., Pittsburgh, Pa.; and B-K Engineering Co., Wilkes-Barre, Pa., have been appointed distributors by Universal Cooler Corp.

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Manufacturers of AUTOMATIC CONTROLS for Oil Burners • Gas Burners • Coal Burners • Electric Refrigerators • Furnace Fans • Mechanical Stokers • Industrial Ovens • Ice Machines • Unit Heaters • • • Also of Sign Flashers • Mercury Switches • Electric Heaters • Corrugated Metal Bellows

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AUTOMATIC OIL HEATOR

The Same People

who have food to keep cool have a house to keep warm. You might as well earn both profits.

The SUPER Automatic Oil Heator offers successful merchandisers of electric refrigerators an opportunity for double profits.

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CONFIDENT OF THE FUTURE FOR COPELAND

(Left to right)—Edwin H. Brown, vice president and treasurer; William Robert Wilson, chairman of board; Louis Ruthenberg, president and general manager; W. D. McElhinny, vice president in charge of sales; E. L. Barger, chief inspector; Glenn Muffly, chief engineer; Edward Hughes, works manager; C. W. Hadden, executive staff.

COPELAND HEADQUARTERS NOW ESTABLISHED IN NEW PLANT NEAR DETROIT

(Concluded from Page 1, Column 1)

and 200 feet wide. On the east side is a wing 250 by 56 feet in size, in which will be housed the engineering laboratories, factory garage, service tool and surplus stock departments and the factory office. In one rear corner of the plant, behind glass and wire caging, is the service stock room, and on a large mezzanine floor, in the opposite corner, are located the welfare department and lunch and rest rooms. Two small fireproof buildings in the rear of and separate from the main plant house the galvanizing and tinning department and refrigerant storage.

Shipments were resumed on November 13 in the new plant after a shutdown of less than two weeks, during which inventory was taken and equipment and stock were moved.

The personnel of the Copeland organization has been transferred virtually intact to the new plant.

According to a statement made by President Louis Ruthenburg. "The benefits arising from the re-location in Mt. Clemens will shortly be reflected in maximum service to our distributing organization, and in even better products and better earnings. Copeland is now in the most advantageous position in its history to maintain and enhance its reputation as a manufacturer of electric refrigeration."

KEROTEST
FORGED BRASS VALVES
for Mechanical Refrigeration
Quality Shut-off and Cylinder valves in any standard designs or to your specifications.
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PITTSBURGH, PENNA.

E. T. WILLIAMS ATTACKS ESSINGTON'S STATEMENT IN REPLY TO DR. KEGEL

(Continued from Page 1 Column 5)

of Mechanical Refrigeration Equipment on July 9, 1929," the demonstration by Mr. Williams is referred to as follows:

"The principal subject of discussion before your Committee during the last several months has been with reference to the Health Department's so-called 'measuring stick,' or provision (Section 2156 h- (a) that

'No direct refrigerating system other than approved unit systems * * * shall be installed or maintained in any place of human habitation unless such system is * * * so designed, constructed and maintained that not more than two pounds of refrigerant can escape or leak therefrom during a period of twelve hours or less into any place of habitation through any (possible) leak or rupture of the system, or more than ten (10) pounds can escape or leak therefrom during a period of twelve hours or less into any basement, cellar or uninhabited part of the building in which such system is located.'

"It is maintained by the Manufacturers' Committee that this provision will be an absolute bar to the installation of multiple systems in residential buildings in the city of Chicago. Demonstrations have been offered of devices which, it is claimed, come within the limitations of this provision. The Peerless device does not conform to this requirement; and while the Servel device shut off, after one demonstration, after a leakage of 2¼ pounds, neither Mr. Williams nor Mr. Bright, nor anyone else, would state to the Committee that he would recommend that that device be manufactured commercially, or be sold to a customer, or that it would work as an actual installation. The entire demonstration, as admitted by Dr. Kegel and Mr. Williams, was not a demonstration of the device, but merely a demonstration of the Health Department's theory. Surely, this Committee will not recommend the passage of an ordinance having for its basis a laboratory experiment which has not yet been incorporated into a practical commercial machine. Only after months of experiment and demonstration can any refrigeration equipment be recommended to the public for use by the public."

In his letter of protest, Mr. Williams recites the following:

"(a). The system demonstrated will be commercially manufactured, sold and installed, and systems lacking equivalent safety features will unquestionably become practically unsalable in competition with it.

"(b). The system demonstrated was made up largely of crude devices which could be obtained on the market in the shortest time. It was stated that this particular demonstration model, with the specific devices therein employed, would not be sold or installed for a customer. However, it was explained that these particular devices would be specially designed for their intended purpose and to simplify their construction; that systems employing the same principle of control demonstrated in the model would be sold and installed, and that they would be practicable and reliable in operation.

"(c). You have called this 'A laboratory experiment,' yet it was clearly explained that the devices were improvised, and you seem to give the impression that we are in doubt ourselves as to its workability in an actual installation and that months of experiment and demonstration are necessary before it can be offered to the public.

"(d). You say that Mr. Bright nor anyone else would state that he would recommend that the devices be manufactured commercially, et cetera. Mr. Bright informed me that he would rather go entirely out of the business than recommend the installation of any direct multiple system in a building where persons sleep; that he regarded this particular system as workable and practicable, and that it was out of consideration of that part of the industry that advocates and installs multiple systems that he refrained from expressing his fixed and definite opinion that all such systems are dangerous and should be prohibited. Your summary of this particular matter seems spacious and may well mislead.

"(e). There is nothing complicated nor that needs extended experimentation and demonstration in this system. A competent engineer acquainted with this class of work would readily design the various devices to function exactly as required. The amount of leakage possible from any rupture in any part can be limited to any specified amount from one pound upwards. The system demonstrated contained exactly 19-1/8 pounds of refrigerant. The same size system can be designed to operate perfectly with a total refrigerant content of less than one-half this amount. I make this statement definitely and positively and without reserve.

"(f). It is regrettable that there is such complete misunderstanding apparent toward the substitution of specially designed devices for those improvised for demonstration on account of the lack of time.

"(g). The industry as well as the Chicago Council and every right-minded person should encourage and support any and everything that is offered that holds any hope or possibility of making these systems safe or reducing their menace in the home."

Mr. Williams comments in his letter on Senator Essington's reference to the Peerless system which was also designed to comply with the Health Department requirements. (The Peerless system was described and pictured in the October 23 issue of the NEWS.) Mr. Williams says:

"You state that the Peerless device (air-tight venting system) does not meet the Health Department's 'measuring stick.' The Health Department has officially approved this system, and accepts it as fulfilling its proposed code requirements. There is no question as to its simplicity, reliability, durability and practicability for effectively preventing refrigerant which may leak from the primary systems escaping into the building. It is no more complicated than, and just as effective as, the back venting or sewer connected sanitary fixtures, which is universal practice in all civilized countries."

Other points in the Essington brief which are attacked by Mr. Williams include the status of the National Refrigeration Code sponsored by the American Society of Refrigerating Engineers. Under the heading, "Comparison of Ordinances Before the Committee on Public Health," Senator Essington stated the case as follows:

"In the Health Department's Summary much weight appears to have been given to what is designated on page 12 as 'a code (d) prepared by a committee of The American Association of Refrigeration Engineers.' As a matter of fact, this so-called code has not been approved by The American Society of Refrigerating Engineers, and there is but little probability that it will be so approved. This draft is not properly before your Committee, and has not been presented with the sanction or authorization or recommendation of any group or body or association. It was drafted by a committee, of whom Messrs. Glenn Muffly, C. C. Spreen and E. T. Williams were members, all of whom have appeared before your Committee. This draft of code does not adopt the 'measuring stick of safety,' as claimed on page 14 by the Health Department. At the insistence of Mr. E. T. Williams, there was presented in the draft, as an alternative provision,

(Concluded on Page 15, Column 1)

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THE PUREST
SULPHUR DIOXIDE
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WE HAVE AN AGENT WITH OUR PRODUCT IN STOCK, NEAR YOU — WIRE US WHERE WE CAN SERVE YOU
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Zerozone and McCray at Philadelphia Food Show

NEWTON SUPPLY COMPANY display at the recent Philadelphia food show held October 14 to 26. A Zerozone commercial unit was shown operating a No. 3210 McCray display case. A household model Zerozone was also in operation.

NEW PLANT PROVIDES ROOM FOR GROWTH

(Left to right)—Corridor view of the new general offices. The wall in the rear of the picture marks the building's lobby entrance. Beyond is the accounting department and the offices of the leading officials. A view of President Ruthenberg and his office in Copeland's new Mt. Clemens, Mich., plant. Portion of the lobby of the new plant. Copeland Accounting Dept. Corner of the Service Dept. A view of the Purchasing Dept.

(Concluded from Page 14, Column 5)

to be applicable only if practicable, and then instead of the safety requirements now recognized by the industry, the following provision:

'1509: One hundred pounds or less of refrigerant will be permitted, provided:

'(a) The pressure imposing element, condenser, liquid receiver, distribution headers and corresponding end of the enclosing conduit system are in a separate machinery room.

'(b) Not over three (3) pounds of refrigerant can escape in eight (8) hours from any break in any part of the system not located in the machinery room.'

"Section 1508 of the draft of code provides under what conditions one hundred pounds of refrigerant or less will be permitted without regard to any limitation on the amount of refrigerant which can escape from the system."

Mr. Williams interprets the situation differently as follows:

"The A. S. A. Sectional Committee Code was approved by the Executive Council of the American Society of Refrigerating Engineers on Friday, November 15, 1929. This is the sponsor body of the A. S. A. for this refrigerating code. This approval is only subject to a majority vote of the 27 national organizations which comprise the A. S. A. Sectional Committee concerning a few minor changes made at members' suggestions in voting last month. The larger part of the code has already been approved by twenty-four member organizations, with two voting against and one not voting. It will thus be seen that this code is an accomplished fact.

"You state (referring to this code) 'it was drafted by a committee of whom Messrs. Glenn Muffly, C. C. Spreen and E. T. Williams were members,' et cetera. The committee you evidently refer to is the Technical Committee of the Refrigeration Division of the N. E. M. A. This Committee met in Washington on October 7th. The draft was completed on that day and officially adopted as a recommendation to the A. S. A. Sectional Committee by the N. E. M. A. Division on October 8th. There were five members of this committee who are also members of the Chicago Advisory Committee, of which Mr. C. Bourke Corcoran is chairman and you are counsel. These members voted unanimously for this draft. The Messrs. H. D. Edwards, Glenn Muffly, C. C. Spreen, mously for this draft: The Messrs. H. These men constitute a majority of the Chicago Committee, and any effort to discredit their work should be most carefully considered."

Essington Says Document Was Approved By Manufacturers' Committee

Other statements in the Essington brief which are disputed by Mr. Williams have to do with the guinea-pig demonstration by Dr. Kegel, and number and causes of accidents in Chicago.

In reply to Mr. Williams' letter, Senator Essington wrote, on November 20, 1929, expressing regret if any errors occurred in the instrument.

Under date of November 25, 1929, Mr. Williams again wrote Senator Essington requesting advice as to when and where the meeting referred to was held and as to who was present. Commenting on the notices sent out by Chairman Corcoran of the Chicago Committee, Mr. Williams says:

"The only notices I have received lately from Mr. Corcoran were one on the 13th of November, which reached me some time after seven o'clock in the evening on a train en route from New York. This read as follows:

'IMPORTANT MEETING REFRIGERATING ADVISORY COMMITTEE HERE TEN O'CLOCK THURSDAY WIRE.'

"This, in effect, constitutes notice after the fact, as there was no possibility of reaching Chicago from New York in time for the meeting.

"The next notice received was dated Chicago, November 16th, 11:31 A. M., reading as follows:

'COMMITTEE ON PUBLIC HEALTH CITY OF CHICAGO WILL HOLD HEARING ON REFRIGERATION MONDAY NOVEMBER EIGHTEENTH TEN THIRTY A. M.'

"This telegram reached me at my home on Saturday night. I arrived in Chicago at 9 a. m. Monday morning, and called on Mr. Corcoran before the meeting. The only other member present was Mr. Smithson, of the Frigidaire Company. Mr. Corcoran at that time handed me a copy of your brief without comment beyond stating what it was.

"With regard to the meeting called for November 14th, I was advised that no meeting occurred. Mr. H. D. Edwards received a telegram at 3:30 o'clock, on the 13th, advising him of the meeting and too late for him to reach Chicago in time. On that day, Mr. A. H. Baer was in Boston, and I question if he received notice there. Mr. Stevenson was in Schenectady and received notice but did not attend. Mr. Kritzer has telegraphed me today as follows:

'NO VOTE TAKEN ON ESSINGTON BRIEF MEETING NOVEMBER FOURTEENTH.'

"In view of failure to give proper notice of the meeting, and the fact that less than a majority were present, it hardly justifies the statement in your letter reading:

'However, Mr. Corcoran called a meeting of the Manufacturers' Committee for the purpose of acting with reference to the matter, and the members present approved unanimously of this brief in the form as it was submitted to the City Council.'

"I think you will agree that it is a little far-fetched to indicate that the committee has acted on this document."

The brief filed by Senator Essington as counsel for the Manufacturers' Committee consists of 15 pages of typewritten matter, and was in answer to a 24-page printed booklet published by the Department of Health of the city of Chicago, and submitted to Chairman Terrence F. Moran and the members of the Committee on Public Health of the City Council, City of Chicago.

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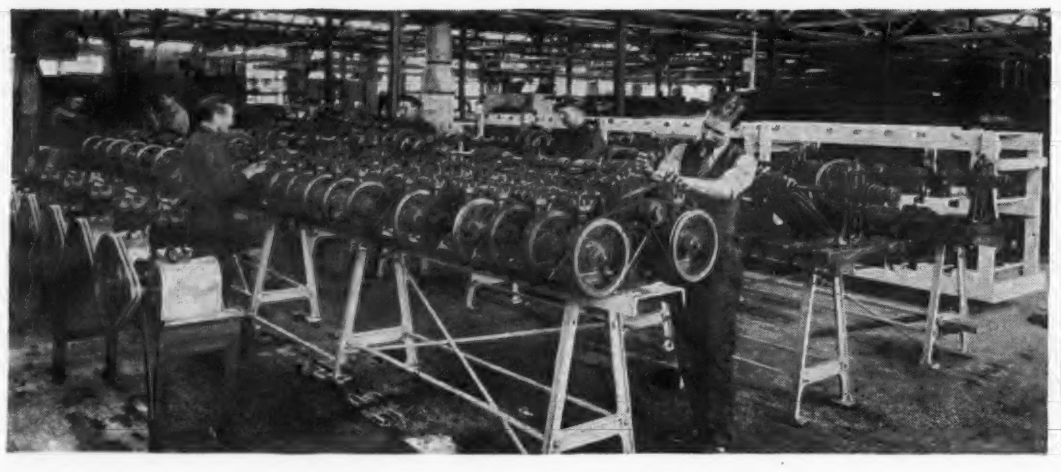
ELECTRIC REFRIGERATION

A SIZE FOR EVERY COMMERCIAL PURPOSE

VIEWS OF THE NEW AND ENLARGED PLANT OF



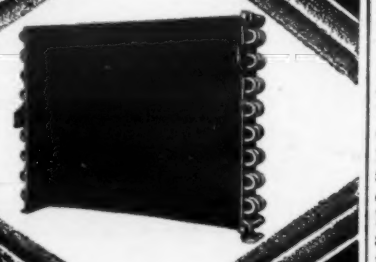
(Left to right)—Exterior view of new Copeland plant at Mt. Clemens, Mich. One of the condensing unit assembly lines. Another, several times as long, is devoted to commercial units exclusively. The motor testing lines.

Motor assembly section from which the motors go to the testing lines in the background. In the center may be seen the sound-proof room (white structure) where motors are tested.

McCORD BUILT CONDENSERS

Type "B" Spiral Fin Continuous Coil McCORD CONDENSER
The popular "bee hive" condenser designed to occupy a minimum of space. It is installed so that all air currents created by the fan pass over the coils giving great capacity with a small amount of tubing.

Type "A" Double Row Spiral Fin McCORD CONDENSER
Adapted to the larger refrigerating units used commercially and for apartment house installations. This condenser is made up of seamless, bright annealed tubing with continuous corrugated spiral fin that has made McCord condensers leaders in the field.



Type "A" Triple Row Continuous Tube McCORD CONDENSER

McCORD RADIATOR & MFG. CO
DETROIT MICH.

WINTERS & CRAMPTON WINS REFRIGERATOR LATCH PATENT CASE

THE Supreme Court of the United States, on October 14, awarded a decision to Winters & Crampton Mfg. Co., Grandville, Mich., against the Sanitary Refrigerator Co., Fond du Lac, Wis., and Dent Hardware Co., Fullerton, Pa., holding that the Winters & Crampton patent No. 1,385,102, granted July 19, 1921, for a refrigerator latch, was valid and infringed by the two companies. This decision ended about four years of litigation, during which four lower courts awarded conflicting decisions, two holding the patent valid and infringed, and the other two, the patent valid and not infringed.

Inception of the litigation was brought about when Winters & Crampton instituted suit against the Sanitary Refrigerator Co. for infringement of the patent by the latch which it used in the manufacture of refrigerators. The Dent Hardware Co., which manufactured and sold the latches to the Sanitary Company, although not itself a party to the suit, employed counsel and conducted the defense at its own expense. The case was tried in the Eastern District Court of Wisconsin and Judge Geiger, of Milwaukee, held that the patent was valid and infringed, enjoined further infringement and ordered an accounting.

Immediately following the successful outcome of this case, Winters & Crampton instituted suit against the Dent Co. in the Eastern District Court of Pennsylvania, at Philadelphia. Judge Dickinson, in his opinion, held that as to the five specific claims, 1, 2, 3, 4, and 7, of Patent No. 1,385,102, the question was not as to their validity but as to their scope, there being in effect no denial of the plaintiff's right to the specific construction described, and that these claims should be so read as to restrict their right to specific construction, and was not infringed by the defendant's latches. He dismissed the bill of complaint.

In the appeal by the Sanitary Co. to the Circuit Court of Appeals for the Seventh Circuit at Chicago, the defendant admitted the validity of the five specific claims, accompanied by a statement "that validity was recognized only in view of an asserted construction which gave to each claim so narrow a field that infringement was not disclosed." The court, finding that the sole issue remaining was one of infringement of these claims, held that, while they were extremely narrow and were restricted to the particular structure disclosed, they had some range of equivalency and were infringed by the defendants' latch; and affirmed the decree of the Eastern District of Wisconsin in respect to them.

On the appeal to the Circuit Court of Appeals for the Third Circuit at Philadelphia, in the case of Winters & Crampton against the Dent Company, the defendant again conceded that the five claims were "valid if limited to the specific structure disclosed," but claimed that when so limited, it did not infringe. The court, while if had grave doubt as to the validity of these claims, finding that, if valid, their scope was clearly confined to the structural design disclosed and had only a narrow range of equivalency—and not agreeing with the opinion of the Circuit Court of Appeals in the Sanitary case, which had been handed down—held that they were not infringed by the Dent latch; and affirmed the decree of the Eastern District Court of Pennsylvania, dismissing the bill because of non-infringement.

The two cases with conflicting decisions as to the question of infringement were argued before the Supreme Court of the United States on April 19, 1929, and were not decided by the Supreme Court until it reconvened in the fall after the summer recess. Mr. Justice Sanford, of the Supreme Court, on Oct. 14 handed down the opinion which affirmed the decision of the Circuit Court of Appeals for the Seventh Circuit in the Sanitary case, and reversed the decision of Circuit Court of Appeals for the Third Circuit, holding that the patent of Winters & Crampton was valid and infringed by the Dent Hardware Co.

In the opinion handed down by Mr. Justice Sanford, he held that since both courts in the Sanitary case held the five specific claims to be valid, and neither court in the Dent case held them to be invalid, and the Dent Co. in defending for Sanitary Co. in its case and for itself in the Dent case, admitted in both Circuit Courts of Appeals that these claims were valid if limited to the specific structure disclosed, we have no occasion here to determine the question as to the validity of these claims when thus limited.

"This brings us to the question as to whether the five specific claims of the Winters & Crampton patent were infringed by the refrigerator latches manufactured by the Dent Co. and used by the Sanitary Co.

"The Winters & Crampton patent, No. 1,385,102, relates to a latch of the swinging lever type, particularly adapted to refrigerators. The latch lever is mounted upon the door of the refrigerator to engage with a keeper on a door case of the refrigerator, automatically engaging therewith and wedging the door tightly closed when the door is swung to closed position, irrespective of the position which the latch lever may have on the door during the closing operation. The latch lever may be positioned either vertically or horizontally, but when the door is closed it automatically engages with its keeper irrespective of what position, vertical or horizontal, the lever may be in, and will securely and tightly hold the door in closed position.

"The Dent latch is made under patent No. 1,575,647 for lock devices for refrigerator doors, issued March 9, 1926, to T. O. Schrader, assignor to the Dent Hardware Co. In his application for this patent Schrader said: 'I am aware of (Winters & Crampton) patent No. 1,385,102, dated July 19, 1921, and I disclaim the structure therein disclosed, as my invention is differentiated therefrom.'

"The latch manufactured by the Dent Co. differs only slightly in form from that shown in the Schrader patent. It is in the main an exact reproduction of the structure disclosed in the Winters & Crampton patent. It has, like it, a keeper attached to the door casing, with a triangular head, and a lever latch with a handle and two arms, whose functions are to trip or give a kick to the latch lever by their coaction with the lever head and wedge the lower arm under it, regardless of the position of the latch lever when the closing operation begins. The only differences are that in the Dent latch the keeper has on the inner or door side of the triangular head a lug projecting inwardly towards the latch lever, and the upper arm of the latch lever is a short cam placed at the pivot of the latch lever, and so constructed and at such an angle that it rides upon and contacts with the lug on the side of the keeper head, instead of with its upper curved side, as in the Winters & Crampton structure. The coaction of this shortened arm with the lug operates, however, on the cam principle, just as the coaction of the longer upper arm with the curved upper surface of the keeper head in the Winters & Crampton structure, to trip or kick the lower arm of the latch lever into the wedged position under the keeper head.

"Despite the changes in the Dent latch, we find the two devices are substantially identical, operating on the same principle, and accomplishing the same result in substantially the same way, the slight change in the form of the Dent latch is merely a colorable departure from the Winters & Crampton structure. In the Dent latch the lug on the inner side of the triangular head of the keeper is a part of the head. And at the place where the shortened upper arm of the latch lever comes into contact with it, the of surface of this lug forms in effect the upper side of the keeper as a substitute for the upper side in the Winters & Crampton structure, which, while left in place, performs no function whatever, just as if it were cut away.

"Although the claims of the Winters & Crampton patent are limited to the structure therein disclosed, we find that they are infringed by the device of the Dent latch.

"The fact that, as the Dent device makes two reciprocal changes in the form of the Winters & Crampton structure, one by the insertion of the lug on the keeper head, and the other in the shortened upper arm of the latch lever, and one alone of these changes cannot be substituted in the Winters & Crampton structure without the other, so as to make it operative, is plainly insufficient to avoid the infringement."

Selling Service

From a report on "Public Contact Training Methods and Principles," by the Industrial Relations Committee of the National Electric Light Association.

AFTER all, this matter of public contact in connection with a public utility or any other business is largely a matter of selling. The contact may not have as its immediate object any direct sale, but should have as its ultimate object something akin to the selling of service offered by the organization which the employee represents. From this point of view, the adjustment of a complaint is just as much a matter of salesmanship as is the securing of the signature to an order for electrical apparatus. Also giving information to an inquiring passenger on the street car is selling of transportation.

Giving proper attention to the individual who pays a gas or electric bill should be looked at also as a matter of salesmanship. Practically every contact can be in the same way considered as a matter of securing good will from the customer, and actually making that customer, either consciously or unconsciously, desirous of buying the commodity or the service which is sold.

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Sheet Metal Parts
To Your Specifications
Bases, Angle Iron to support units.
Guards—to enclose units.
For Household Refrigerators we make outside steel panels, food compartments, etc.
Ice Cream cabinets and parts.
MOTORS METAL MFG. CO.
5936 Milford St. - Detroit, Mich.

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LARGE PLEASANT ROOMS
Rooms for one person: $2.00 to $5.00 daily
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World renowned Restaurant. Real luscious Southern cooking—oyster bar—finest sea food—worth a visit just to dine at
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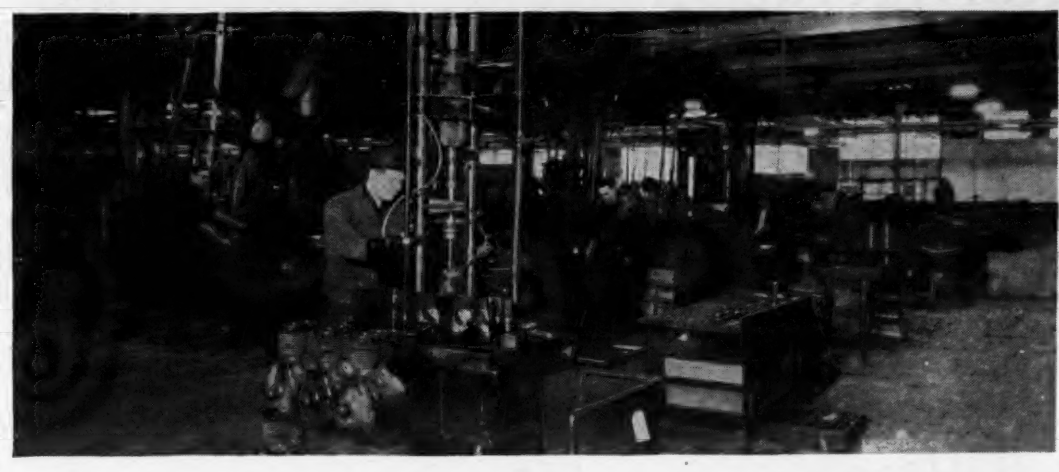
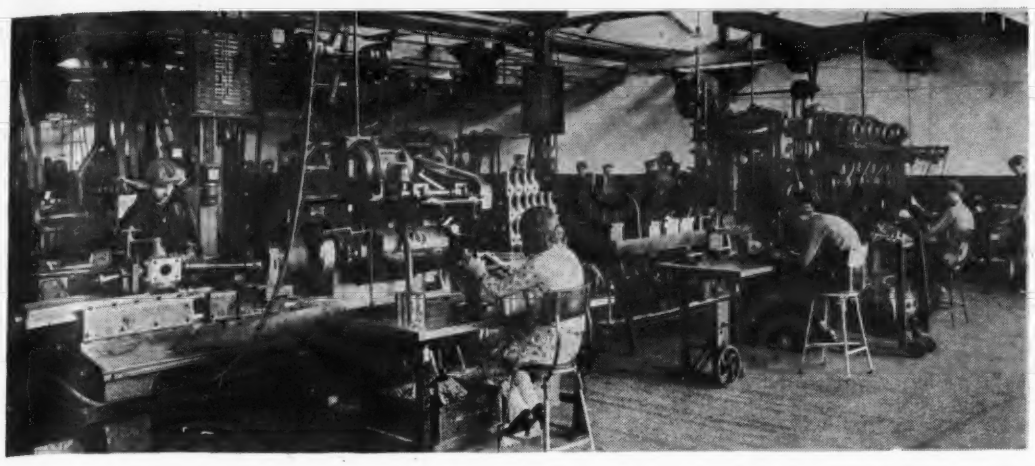
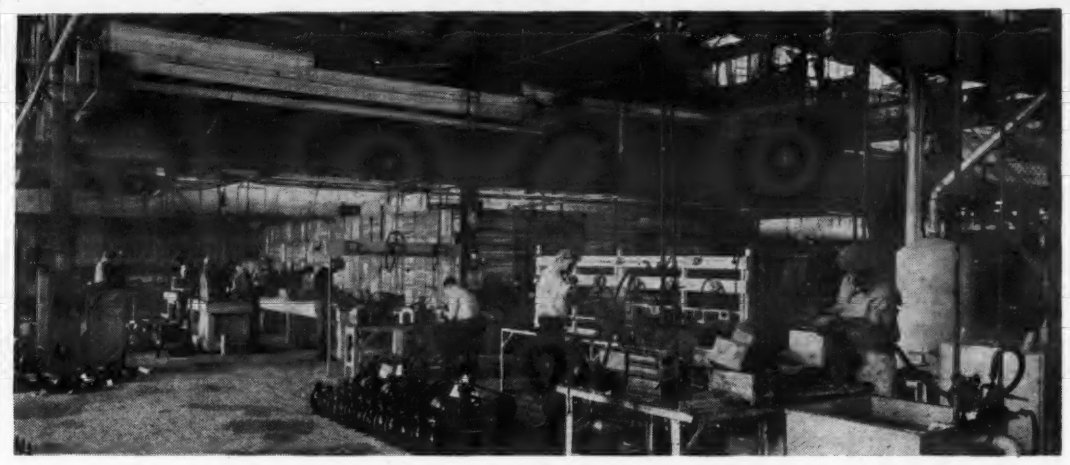
THE COPELAND COMPANY AT MT. CLEMENS, MICH.







(Left to right)—Cooling unit assembly. Section of the machining department. Here occur the first processes of production. A view of the inspection from which are carried parts and materials that have been passed on to the machining department in the background. Repair section of service department showing portion of mezzanine floor which will be used for storage of special parts and will house welfare and rest rooms.

HIGH TARIFF FORCES AUSTRALIAN DEALER TO MAKE CABINETS

By Keith E. McClure

THE progress of electric refrigeration in Adelaide, South Australia, has required the most constant effort by the distributors. In the trend of progress it has not been the good fortune of any concern to have the golden dollars showered upon them; rather learning with much pain in the early days that vultures of service had devoured the well earned profits, but as they became more experienced and with more hard work in educating the public to the benefits of domestic refrigeration.

It is believed that "Kelvinator" first blazed the trail, followed soon after by "Frigidaire," both under the wings of Messrs. Parson & Robinson, Ltd. Kelvinator changed hands at this juncture to Mechanical Supplies, Ltd., and these two companies have, under great difficulties, paved the way of domestic refrigeration. In this comparatively young country considerable amounts were expended in advertising, canvassing, etc.

Following at their heels, "Copeland," "Rice" and "General Electric" makes blossomed on the local market, and quite recently "Electrolux" sold by its own company. "Electrice" distributed in Sydney, New South Wales, has established its name on the map, and the latest refrigerator to the midst is "Ice-O-Matic," distributed by David Garvie & Co.

Messrs. Parsons & Robinson, Ltd., Pulteney St., Adelaide, selling "Frigidaire," have a fine connection with their kindred lines, such as Delco-Light, washing machines, etc. They have a number of dealers in country districts with live-wire sales and service staffs.

Mechanical Supplies, Ltd., Grenfell St., Adelaide, handling Kelvinator, have emerged from a humble beginning to a commanding position in the business, and the name "Kelvinator" through their efforts is almost a household word. They operate an extensive plant, where cabinets and butchers' boxes are built to the client's satisfaction.

"Copeland," now sold by the Implement Company, Bank and Blythe Streets, Adelaide, has enjoyed prosperity in the past. They now make wooden cabinets, counters, etc., at their own factory, and are making a bold bid for the future business in the state.

Fred Jessop Company, Pulteney Street, sells the "Rice" refrigerator, with window show of the line in a conspicuous locality.

The General Electric refrigerator is distributed by Australian General Electric, Grenfell St., Adelaide. Their field activities include salesmen on a straight commission basis, and with their electrical merchandising connection many sales have been the result during the season.

Electrolux, sold by its own company, is in a happy position in regard to prospects. They have a systematic follow-up of previous vacuum cleaner sales which have given them a tip-top first year.

Unlike the United States, very few people over here possess cabinets like the "Jewett," "Leonard" and "Seeger," hence the customer is sold on cabinet completely installed.

Tariff on foreign-made refrigerators is enormous, the cabinets being classed as furniture, and a 65 per cent duty is imposed. This raises the selling price somewhat and necessitates the local manufacture of wooden cabinets. However, the refinements, design and efficiency of the United States cabinet are greatly in demand here by the well-to-do folks and high class business establishments.

Ice men here are beginning to realize the competition, and now one concern offers the public the loan of an ice chest for the summer, the only cost being the price of the cakes of ice.

Small commercial installations are rapidly gaining hold in South Australia, such as cool drink and ice cream cabinets, and small butchers' plants.

Multiple systems are few and far between in this city, although there is a demand for a beer cooling system, and we are awaiting a United States manufacturer to provide this non-Volstead country with something to cool their beer. Our American brothers have yet to realize how far this country is away from a sales convention and a service school, therefore, a visit of the manufacturer's engineer will be readily welcomed, and with a better co-operation between maker and distributer a prosperous future is assured for refrigeration in Adelaide, South Australia.

DOW BOOKLET CONTAINS DATA ON REFRIGERATION

A booklet stating the uses of calcium chloride for refrigeration processes has been issued by Dow Chemical Co., Midland, Mich. Refrigeration by means of vaporizing liquids is also explained. Density, temperature, composition and freezing points of calcium and sodium chloride solutions are shown on charts.

The number of cubic feet of gas that must be pumped per minute at different condenser and suction pressures to produce one ton of refrigeration in 24 hours, the refrigeration effect of ammonia, B. t. u. per lb., the refrigerating effect of one cubic foot of ammonia gas at different condenser and suction (back) pressures in B. T. Units, and the tons of refrigeration per ton of ice, are given in different tables.

Specific and latent heat of various food products, such as meats, vegetables and canned goods, and their cold storage temperatures, are also given in the booklet. Safety first hints, to be used in case individuals are burned from gas or electrical connections or overcome by escaping refrigerants, are included.

Dow calcium chloride is furnished in three forms: liquor, solid and flake. The company maintains 75 shipping points throughout the United States and Canada.

BROOKLYN GAS CO. PLACES 318 ELECTROLUX UNITS IN SUBURBAN APARTMENT

Forest Hills, L. I., N. Y.—Chatwick Gardens, a large apartment dwelling, which occupies both sides of a street for an entire block, was recently equipped with 381 Electrolux refrigerators. The dwelling consists of 14 six-story elevator units, seven units being placed on each side of the street. Brooklyn Union Gas Co. installed the refrigerators.

Like other apartment dwellings in Long Island territory, Chatwick Gardens was required to have an individual gas riser for each apartment or unit, with gas meters located on service headers in the basement, so each of the 381 apartments is now piped for gas with its own 1-in. riser. Every refrigerator in the dwelling is connected to the gas riser by ½-in. pipe, and to the water pipe by ⅜-in. copper tube. A feature of the installation is the fact that 72 of the 381 refrigerators are made up of units placed in small size boxes for convenience and compactness.

Owing to the period of time over which the completion of this dwelling was spread, there was an excellent chance to find the reaction of the tenants and owner to these refrigerators. The water demand has been carefully examined and checked, as well as the gas consumption. The latter has been found to average approximately 1,400 cu. ft. per month of city gas to each apartment, which brings the gas cost to $1.51 per month.

Chatwick Gardens are located adjacent to the famous tennis stadium in Forest Hills, where world's championship matches are often played.

ENAMELERS STUDY NEW PRODUCTION METHODS

Cleveland, O.—An enameler's training school is being held at the plant of Ferro Enamel Supply Co., Dec. 2-14. This training school was established two years ago by the Ferro Company and was conducted by J. E. Hansen. Mr. Hansen's textbook, "The Technique of Vitreous Enameling," is used as a basis for the course. Lectures, slides, laboratory experiments and actual plant demonstrations supplement lessons outlined in the book.

Since its founding, the school has been attended by such men as Edgar Davis, superintendent of porcelain department, Servel Sales, Inc.; Sidney Vickery, enameling plant superintendent, Beach Foundry, Ltd., Canada; Fred G. Sutphen, American Rolling Mill Co.; W. Mavor, director, Ferro Enameling Co., Ltd., Canada; William Guenther, Bridge & Beach Co.; and Joseph Karr, Karr Range Co.

To Establish Dealer and Customer Confidence

REFRIGERATOR DOORS

Should Be Fitted With

RIDER'S DOR-SEAL

Write for samples

P. L. RIDER CO.

Worcester, Mass. *Established 1889*

An absolutely air tight door gasket of resilient sponge-rubber in a tough covering.

Compresses easily. Impervious to moisture, temperature and rough usage.

Seals doors 100% air tight, neat in appearance, and easy to attach.

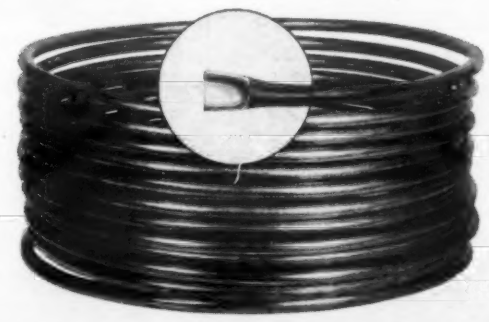
Has easily passed every test known to the industry.

Dehydrated and Sealed Tubing Cuts Time and Trouble

Moisture and scale in the lines is the dangerous enemy of electric refrigeration service. Wolverine solder sealed, dehydrated seamless copper tubing is a quick, economical and lasting answer to the problem.

Wolverine tubing is annealed uniformly, brightly finished inside and out, carefully tested at the factory. It is made to A. S. T. M. Specification (B 68-27T).

Straight Lengths and Coils for Immediate Delivery.



WOLVERINE TUBE CO.

SEAMLESS COPPER BRASS & ALUMINUM

1431 Central Ave., Detroit, Mich.
Phone Cedar 5000

Sales offices in all major cities. Write or phone for name of nearest representative.

Electrical Refrigeration Efficiency

is assured with

Wirfs PATENTED
"AIRTITE" GASKET

Improves the efficiency of door contacts on wood or metal boxes and decreases operating costs—a valuable economy talking point for salesmen. :: ::

WIRFS CORPORATION
135 S. 17th St. St. Louis, Mo.

The Filtrine Filter assures pure, clear water from your ELECTRIC Water Cooler

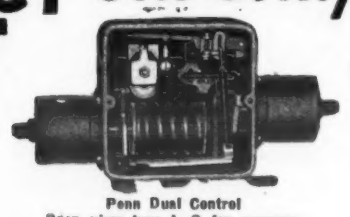
WRITE FOR DETAILS
FILTRINE MANUFACTURING COMPANY
49 LEXINGTON AVE. Brooklyn, N.Y.
Manufacturers of FILTERS & COOLERS of all sizes.

TO MANUFACTURERS OF ELECTRIC AND GAS UNITS

If you want CABINETS as you want them let PUFFER-HUBBARD build them. We work to specification.

Puffer-Hubbard Mfg. Co.
MINNEAPOLIS, MINN.

Let *One Compact Instrument* do the work of Two



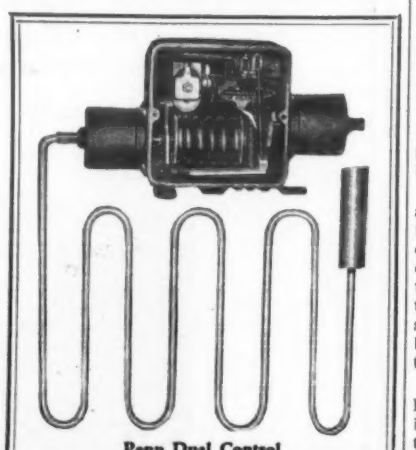
Penn Dual Control
Open view type L S for pressure regulation.

PENN *Dual* CONTROL

GOOD news for manufacturers of electric refrigerators. Out of the Penn Laboratories has come a highly perfected controlling device that performs the operations of two ordinary switches. The Penn Magnet Switch combines regular temperature or pressure control and safety cut-out into one compact unit. Yet the control and safety elements are entirely independent of each other. The high side of the control operates free of the low and adjustments in the low do not affect the high side.

This Penn Dual Control has been especially designed for both commercial and domestic refrigerators, multiple hook-ups, and general commercial work. It eliminates automatic starters that formerly were necessary on motors from ⅛ to 1½ Horse Power. Employing the unique Penn Magnet Contacts, unusually sensitive to pressure and temperature changes, it is capable of handling loads up to and including 1½ Horse Power, Single Phase, Alternating Current and 1 Horse Power Direct Current, either 110 or 220 volts.

The safety mechanism may be supplied to cut-out at any desired pressure up to and including 185 lbs. The low side range is from 20 inches vacuum to 30 lbs. pressure. The operating differential may be varied from a minimum of 1½ lbs. to a maximum of 25 lbs.



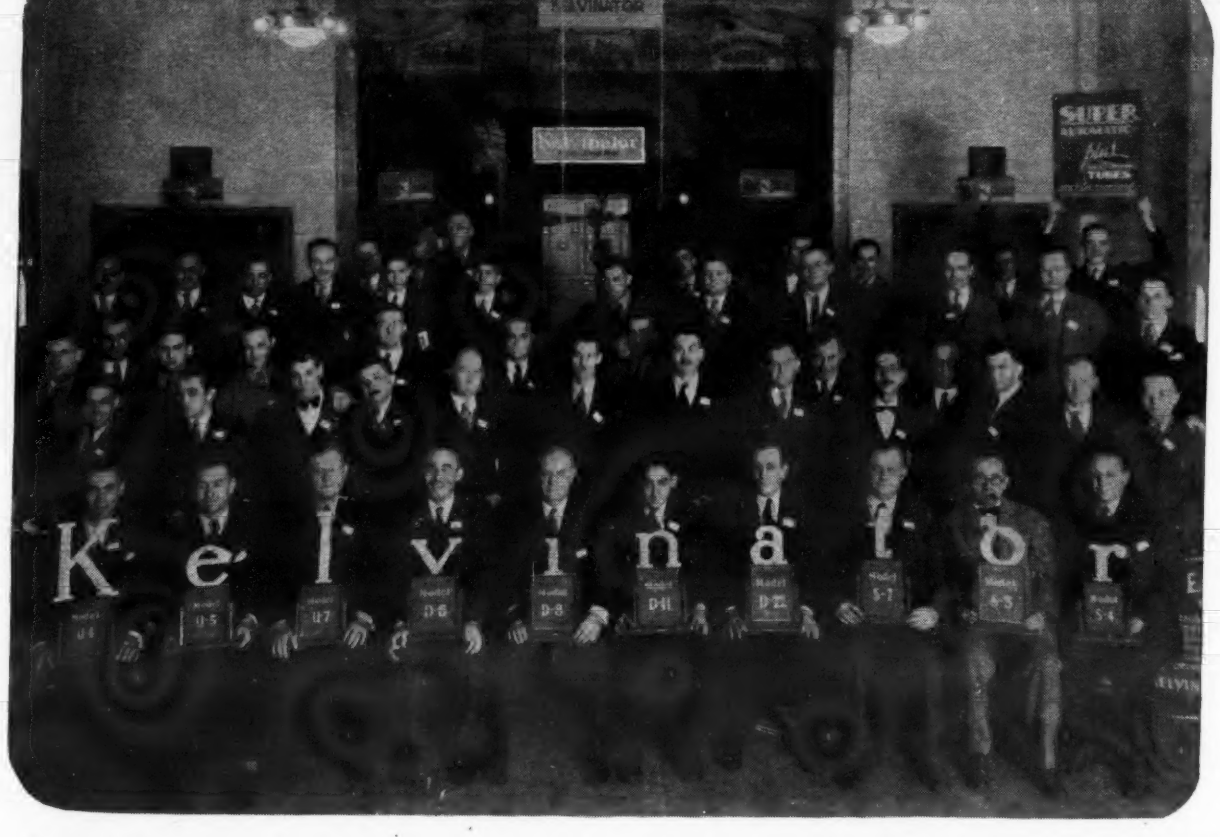
Penn Dual Control
Open view type L S T for temperature regulation.

Send today for complete information on the Penn Dual Control and "Quick Freeze", the cold control attachment for electric refrigerators.

PENN ELECTRIC SWITCH CO.
DES MOINES, IOWA

An organization of proven engineering ability that supplies the largest and best concerns of the country with automatic control switches.

Getting the Story on Ice-O-Thermic Tubes



Seventy-five representatives of E. R. Schollenberger's dealer organization met in Moose auditorium, Hamburg, Pa., Wednesday, Nov. 13, and were given an advance showing of Kelvinator's 1930 line. Schollenberger organization represents Kelvinator in Berks and Schuylkill counties.

J. C. Burton, district factory representative, presented and explained the new Kelvinator models to the assembled dealers. George Moister, manager of Philadelphia Kelvinator branch, followed Mr. Burton on the program and gave an inside history of construction and new features of the 1930 line. Maurice Webb, general sales manager of the Philadelphia branch, discussed selling of the new Kelvinators. A. J. Althouse, assistant general manager of Metropolitan Edison Co., local dealer, spoke on the financial assistance offered by the power company.

ICE MEN CHECKING UP ON RESULTS OF 50 DEGREE CAMPAIGN

By Robert McKnight, Director, National Asociation of Ice Industries

JUST how effective the National Food Preservation campaign has been is not known, but judging from the results of other essay contests, it is probable that hundreds of thousands of people have submitted essays. Every essay writer has become "refrigeration conscious" to some degree, and the list of names of essay writers therefore becomes of great value as a list of prospects for refrigerators.

It is not hard to imagine that that list of names will be divided among the financial backers of the National Food Preservation campaign, those putting up the most money getting the greatest number of names. It is probable that for some months to come chemical refrigerator salesmen will have greatly augmented lists of live prospects to work.

Assuredly this is not the time for ice companies to lay back at ease and decrease their advertising and merchandising activities. Rather, it is the time to increase advertising and merchandising effort, especially in the sale of good ice boxes to replace poor ones.

Members of the Indiana Ice Dealers' Association and some other individual companies are aggressively seeking to put good recording thermometers into their customers' ice boxes to provide honest bases for selling ice refrigerators. Those companies are facing the facts that all ice companies must face, i. e., that there are many poor ice boxes in use which they must replace with good ones or chemical refrigerator salesmen will beat them to it.

This does not necessarily mean that an ice company must sell ice boxes itself; many companies are co-operating efficiently with furniture stores and other established outlets for refrigerators. But whether they sell ice boxes themselves or co-operate with other sales agencies, they must know good boxes from bad; and they must push the former.

The Southern Ice and Utilities Co., headquartered in Dallas, Tex., is making it obligatory upon every employee in the sales department of its twenty-eight plants to test not less than thirty refrigerators a month. It is offering cash prizes for employees who send in the greatest number of refrigerator tests over the minimum thirty. All test cards are sent to the main office for follow-up and plan future activities. Local plant managers coach their salesmen daily on methods of selling ice refrigeration and refrigerators. With this program the company hopes to hold the installation of chemical units to minimums in the towns in which it operates.

"One thing we are trying to impress upon our associates is that chemical refrigerator people are using the month of September for the purpose of accumulating data which will serve as the basis for an already thoroughly prepared follow-up campaign in October, November and December, and it is this follow-up campaign which will tell the effect upon the ice industry," writes L. W. Dawley, of the Southern Ice and Utilities Company.

Members of the National Association have been asked to state their experience with the National Food Preservation campaign, its effect upon them, and to outline any plans they may have to follow it up in their communities. They are urged to answer the questionnaire mailed to them and to return it immediately to Chicago headquarters.—*Ice and Refrigeration.*

DOHERTY SUBSIDIARIES PASS 7,500 SALES MARK IN FIRST NINE MONTHS

New York, N. Y.—Public Utilities Division of Henry L. Doherty & Co., 60 Wall St., reports that its subsidiaries sold and installed 7,641 domestic and commercial electric refrigerators during the period from January through September, 1929. Three hundred and fifty-five units were sold and installed during the month of September.

A list of Public Utilities' subsidiaries and the number of units each sold during the month of September, as well as the number each sold during the first nine months of the year, follows:

	Month of Sept.	From Jan. 1-Oct. 1
Adrian	2	115
Bristol	14	217
Danbury	25	235
Durham	43	165
Erwin		3
Johnson City	8	131
Joplin	20	470
Sedalia		18
St. Joseph	12	530
Toledo	104	2,049
Toledo, Defiance	6	104
Toledo, Lake Shore		66
Toledo, Michigan	2	20
Ohio Public Service	60	2,234
Alliance	2	204
Ashland		95
Elyria	7	233
Lorain	6	224
Mansfield	7	256
Massillon	9	440
Port Clinton	6	135
Sandusky	11	243
Warren	12	404
Public Service, Colo	59	1,284
Alamosa	3	55
Boulder	3	59
Brighton	3	20
Cheyenne	1	21
Denver	37	951
Fort Collins	3	40
Grand Junction	2	72
Idaho Springs		2
Leadville	1	14
Salida	2	10
Sterling	4	40
Total	355	7,641

PROPER RATES WILL ENCOURAGE USE OF APPLIANCES ON FARM

HOW the rural extension policy of an electric public utility company may retard or encourage the adequate use of electrical appliances by farmers is discussed in a report of the Rate Research Committee just issued by the National Electric Light Association, 420 Lexington Avenue, New York City. Under the subject of "Rural Rates" two distinct plans, both of which have proved successful, are explained. The committee, however, recommends a third plan which differs in detail from the two previously mentioned. The following extract shows the importance to the central station of adopting a policy which will encourage the farmer in the use of current-consuming devices:

Rural Rates

THE wide diversity in practice of electric utilities in handling rural customers suggests that further attempts to secure uniformity can be made to advantage. Many plans for rural electrification have been tried and some have been found satisfactory. Rates and line extension policies are so inextricably interrelated that the discussion of one without the other is impossible. A correct solution of the extension problem makes the matter of rural rates relatively simple.

It will be generally admitted that the farmer, as a lighting customer only, cannot be secured on any rate structure which will give the company a fair return. The solution, if it exists, lies in offering the farmer such inducements that he will become a relatively large consumer of electric service. To bring about this solution the farmer must have two things available: first, low energy rates; and, second, the capital to purchase energy-consuming devices.

Many rural extension policies involve considerable capital expenditure by the farmer for line extension. Several policies are, however, in use which permit the construction of rural lines with no such capital expenditure and yet which have been tried over a long enough period to prove that the rural business so acquired is profitable to central stations. Basically, these policies may be divided into two distinct plans both of which have been generally successful. The first plan provides in substance that the company build without charge to the customers such lines as are required, the rural customers guaranteeing that the minimum bill per month for the line extension will be some fraction or percentage of the total line cost.

Under such a plan the farmer pays a minimum bill which is fairly high and which, therefore, will provide a relatively large number of kilowatt-hours without further charge. His first desire is then to use all the energy for which his minimum charge will pay. His capital has not been absorbed in line construction and he, therefore, can purchase many of the energy-consuming appliances which are really necessary if he is to solve his economic problem. The purchase of this equipment permits him to use large quantities of electric service, and the conveniences acquired put him in a favorable frame of mind for further use of electric service. The rates under this plan need not be different in form from or distinctly higher than urban rates. The period over which the minimum guarantee continues is not ordinarily a material factor because after three or four years' use the farmer has purchased enough equipment to consume more energy than his minimum bill covers, and he has learned the convenience and profit of electric service, and so will not curtail its use even after the high minimum period ends. One electric company has 45 rural lines built under this scheme, and not a single line has had a total usage which would have resulted in a bill less than the minimum after a period of thirty months. The rural extension program embodied in Order No. 28 of the Public Service Commission of Pennsylvania is consistent with this plan.

The second plan provides that the rate contain a service charge which varies with the cost or length of line extension to reach a particular rural customer or group of customers. This scheme has practically the same economic basis as the first plan and furnishes a theoretically more accurate distribution of line costs among the customers. A disadvantage as compared with the first plan lies in the fact that no energy must be utilized in order to secure the full benefit of the minimum payment, and for this reason it may have less appeal to the farmer than the first plan. If, however, the service charge contains an adequate customer component, the energy rates may be low enough to induce a very liberal use of service.

The form of rate recommended by the committee differs in detail from those above referred to in that it includes a fixed service charge plus a demand charge in proportion to lighted area, with a low uniform energy charge. Where customers are more scattered than the base charges provide for, a moderate additional charge proportional to the excess distance is provided, or, as an alternative, customers may increase their revenue guarantees to cover the increased investment. A rate of this form has been standardized and adopted by practically all Connecticut utilities with the approval of customer organizations.

NEW YORK SURVEY

How Leading Distributors of Electric Refrigerators are Organized in Metropolitan New York

LEADING makes of electric refrigerators are all being given excellent sales representation and promotion in Greater New York, both the domestic and the commercial fields. All of them report that the apartment house business is a rapidly growing factor of the business and that apartment house builders realize that they must offer modern refrigerating facilities if they are to be successful in keeping their houses filled.

Following is a summary of the dealer organizations of the various makes.

GENERAL ELECTRIC

The G-E refrigerator is marketed here through the organization of Rex Cole, Inc., with headquarters in the French Building at 45th St. and Fifth Ave. The principal Manhattan showroom is just around the corner from the offices, at 7 East 45th St. This is a large, ground floor display, with all the different models of domestic machines attractively arranged. The metropolitan territory covered by this organization includes all the five boroughs of New York City, all of Westchester County, all of Long Island, Orange and Rockland Counties, part of Putnam County, all of Suffolk, and all of Fairfield County in southwestern Connecticut. In the five boroughs there are branch offices and showrooms of Rex Cole, Inc., as follows:

Brooklyn—
Bond and Livingston Sts.
Flatbush and Foster Aves.
8506 Fourth Ave.

Bronx—
307½ East Kingsbridge Road.

Queens—
134 Northern Blvd., Flushing.
168th St. and Hillside Ave., Jamaica.

Staten Island—
245 Richmond Ave., Port Richmond.

Westchester—
85 North Ave., New Rochelle.
100 Mamaroneck Ave., White Plains.

Refrigerators are also on exhibition in this territory at the following showrooms of the New York & Queens Electric Light & Power Co., 28-19 Bridge Plaza North, Long Island City, N. Y.:

35-20 Broadway, Astoria, N. Y.
39-25 Bell Blvd., Bayside, N. Y.
136-25 40th Ave., Flushing, N. Y.
145-22 Jamaica Ave., Jamaica, N. Y.
111-16 Liberty Ave., Richmond Hill, N. Y.
69-19 Fresh Pond Road, Ridgewood, N. Y.

Refrigerators are also on display at:
Model Home Appliance Co., 532 Courtland Ave., Bronx.
General Electrical Appliance Service, 112 West 42nd St., New York.
West Farms Music Shop, 121 Westchester Square, Bronx.
Jewett Refrigerator Co., 16 East 40th St., New York.
Bohn Refrigerator Co., 5 East 46th St., New York.
Gluck & Egan, Inc., 1 Park Ave., Mt. Vernon and 79 Kraft Ave., Bronxville, N. Y.
Electric Servant Co., 443 South Broadway, Yonkers.
United Electric Light & Power Co., 21 Audubon Ave., New York, and 2420 Broadway, New York.

Outside of Greater New York and Southern Westchester, there are dealers who cover their respective territories independently, but are responsible to the New York headquarters. Under these dealers in ten towns outside of New York are sub-dealers—hardware, electrical, or house furnishing stores. The actual installation and servicing is done by the G-E dealer. Following is a list of these dealers, showing the extent of the sales promotional work done out of New York:

Bridgeport, Conn.—Rex Cole, 955 Main St., 5 sub-dealers.
Greenwich, Conn.—Greenwich Electrical Co., 1 sub-dealer.
Middletown, N. Y.—L. C. Gunther, Inc., 3 sub-dealers.
Patchogue, Long Island—Alfred L. Hart, about 35 sub-dealers.
Newburgh, N. Y.—Highlands Electric Co., Inc., 1 sub-dealer.
Glen Cove, L. I.—Home Equipment Co., 4 sub-dealers.
Mt. Kisco, N. Y.—H. G. Houlberg, Inc., 5 sub-dealers.
Stamford, Conn.—Lockwood & Palmer Co., 2 sub-dealers.
Monroe, N. Y.—Orange & Rockland Electric Co., 7 sub-dealers.
Nyack, N. Y.—Phillips & Ibsen, Inc., 3 sub-dealers.

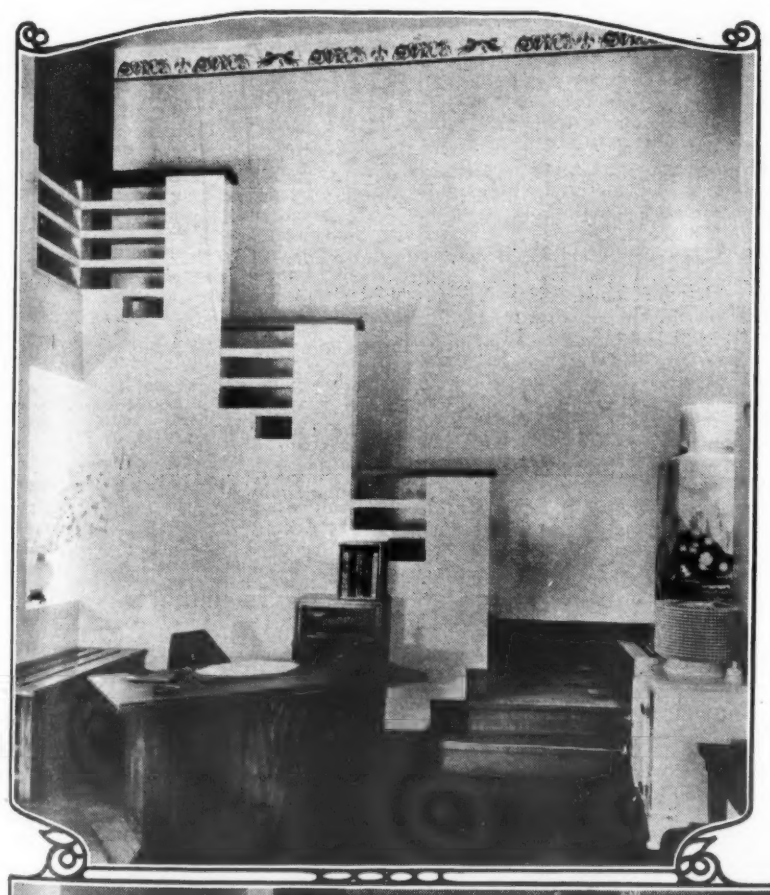
The inspecting of G-E refrigerators in the metropolitan territory is done by six or seven inspectors who work from the Product Department in Long Island City. They also take care of the inspection work in lower Westchester. Outside of these two points, the dealers do their own servicing, but as these machines are built to operate without repairs, this work is incidental to the sales work and includes adjusting of the control mechanism or some current trouble due to outside difficulty. The dealer list given above, it must be said, is being added to constantly so that it must not be taken as complete.

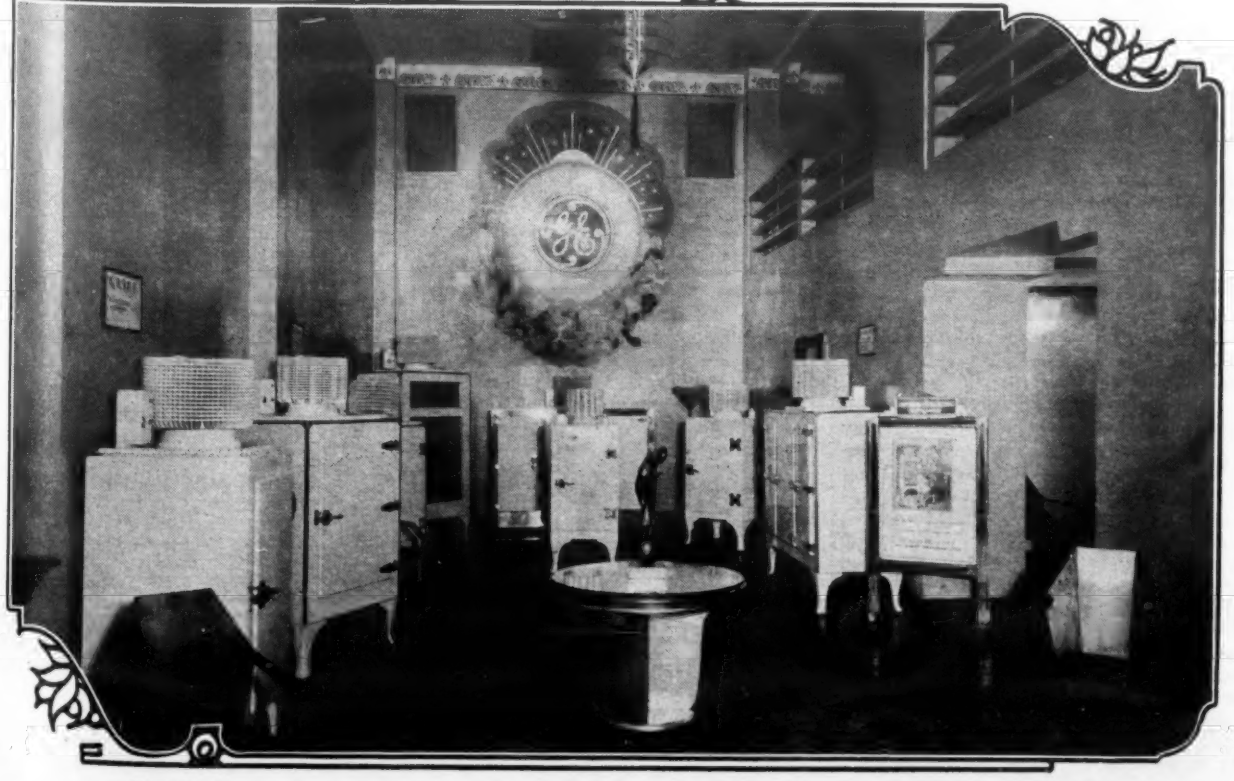
In the New York office of Rex Cole, Inc., are located some of the separate departments that make up the operating activity. Here the Apartment House Department, under the direction of J. J. Massimi; the Commercial Department, with L. H. Jenks, Jr., at its head; and the Manhattan Retail Sales Division, directed by C. V. W. Smith, are established. Other departments in the Manhattan office are the Sales Promotion Department, headed by E. H. Campbell; Operating Department, directed by D. F. Secord; Administration Department, directed by R. Stevenson; Wholesale Department, directed by M. E. Pipkin. The Product Department, under the direction of William Fisher, has headquarters on Long Island.

An interesting and unique feature of the sales promotion program of Rex Cole, Inc., is the home economics division under the direction of Mrs. R. D. Goettler, assisted by Miss L. Fitter. The Modern Kitchen, accommodating 75 guests, is in the Rex Cole building at Livingston Street in Brooklyn. It is here that good-will service in the form of new menus and well balanced meals are created for the user as well as the

(Concluded on Page 20, Column 2)

Artistic Setting Designed to Attract Fifth Avenue Trade





Retail showroom of Rex Cole, Inc., New York distributor of General Electric refrigerators.

PROFITABLE SALES

Selling Rhinelander "Airtite" cabinets equipped with standard mechanical units invariably means increased profits per sale. These beautiful refrigerators in white and colors make an instant appeal to the most discriminating prospect. May we send you catalog No. 70 and complete price information?

RHINELANDER REFRIGERATOR CO.
RHINELANDER, WISCONSIN

E. T. L. Service for Domestic and Commercial Electric Refrigeration
Testing and experimental laboratory service for Manufacturer, Distributor, Central Station — Test data exclusive property of client
ELECTRICAL TESTING LABORATORIES
80th Street and East End Avenue, NEW YORK CITY, N. Y.

Faster, safer deliveries

with WEBB *Slingabout*
REGISTERED U. S. PATENT OFFICE

Up the steps in jig-time goes the refrigerator delivered in a WEBB *Slingabout*. The strong webbing sling, reinforced with sole leather, offers convenient hand-holes on every side.

Safety to the refrigerator and to the walls and woodwork of your customer's house is assured by this thickly padded, flannel-lined canvas jacket.

Cleaner, quicker deliveries mean greater profit for you. WEBB *Slingabouts* are tailored to fit every mechanical refrigerator. Tell us what line you handle and we will gladly quote prices.

CHARLES J. WEBB & COMPANY
116 CHESTNUT ST. PHILADELPHIA, PA.

Fulco
REFRIGERATOR COVERS

"FULCO" covers are used by those dealers who realize the importance of making deliveries in perfect condition—without scratches or broken enamel. For they know that complaints mean dissatisfied customers and loss of business.

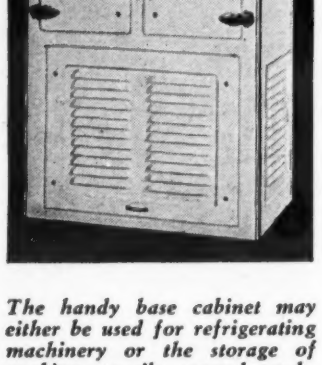
"FULCO" covers are a real service feature that helps sales and holds trade.

Substantially constructed, heavily padded, box-shaped, providing perfect protection.

Give us the dimensions of your refrigerators, and let us quote special prices on your individual needs. Write our nearest house.

Fulton Bag & Cotton Mills
Manufacturers Since 1870
ATLANTA · NEW ORLEANS · DALLAS · ST. LOUIS
MINNEAPOLIS · BROOKLYN · KAN. CITY, KAN

"It was built by BOHN"



The name BOHN is our warranty that the finest materials obtainable have been utilized by skilled craftsmen and refrigeration engineers to build for you this beautiful and scientific product—an all-porcelain BOHN refrigerator.

BOHN installations include many of the leading hotels, restaurants and hospitals in America.

BOHN refrigerators are used exclusively on all Pullman-built railway dining and buffet cars.

The United States War Department has purchased hundreds of all-porcelain BOHN refrigerators for our army barracks and battleships.

In choosing BOHN refrigerators, discriminating home owners throughout the country have given BOHN a representative list of which any manufacturer might be proud.

The handy base cabinet may either be used for refrigerating machinery or the storage of cooking utensils, canned goods, vegetables, etc.

Write for details of the remarkably low prices that are now prevailing.

BOHN REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA

Five Minutes from Juarez, Old Mexico
A Cordial Welcome Awaits You at
El Paso's Newest and Finest
HOTEL HUSSMANN
"On the Plaza"
EL PASO / TEXAS
"You'll be Surprised"
200 ROOMS - 200 BATHS - ALL OUTSIDE $2.50 UP
HARRY L. HUSSMANN, PRES. HARVEY DAY, MGR

The Imitation Food Products Co.
(Branch of The Artistic Production Co.)
107 Lawrence Street
Brooklyn, N. Y.

Ask for our catalog of May 1, 1929. Many new items. Greatly reduced prices. Direct sales only. "Indispensable with refrigerator display."

Smart decorators
are using corkboard
as a background
for modern window displays.
Smart refrigerator salesmen
use it as the background
for convincing sales talk:
"Corkboard insulation
assures faster freezing,
better refrigeration, and
lower operating cost."

Novoid Corkboard Insulation
CORK IMPORT CORPORATION 345 W. 40TH ST. NEW YORK
"Permanent Protection for All Refrigeration"

Sulphur Dioxide!
For Direct Charging!
Every Container Analyzed
"Pure" Bone Dry . . . Cylinders 2 to 150 lbs
ANSUL Chemical Co MARINETTE, WIS
Also . . . Ton Drums - Tank Cars

NEW YORK SURVEY

(Concluded from Page 19, Column 3)

prospect of General Electric refrigerators.

Considerable local advertising is done, both in Greater New York and the smaller surrounding towns of the sales territory. Mats are furnished to dealers by the New York office, and costs divided between the two. This is principally placed in newspapers, and is supplemental to the national advertising done by the General Electric Company.

The John Wanamaker and the Gimbel Bros. department stores in New York also display the G-E refrigerator.

KELVINATOR

The Kelvinator Sales Corporation redecorated its New York showroom at 1 West 47th Street in a very attractive way during the past summer. The showroom has a row of windows on the 47th Street side at which gay striped awnings were hung inside the window, supported by the new style of pole with spear end. Green gauze curtains were hung at the windows and flower boxes arranged to give more color. The effect of the whole room was most unusual for a commercial office and very suggestive of the cooling effect of refrigeration.

At this main office of Kelvinator in New York are located the apartment house, retail, commercial and domestic sales divisions. The service work is handled from Long Island City.

The metropolitan sales quota for Kelvinator takes in New York and the boroughs, Queens and Westchester Counties. The 47th Street showroom is the principal one, and its address is the one given in all the local advertising, such as the billboards, with which Kelvinator has advertised its product in the metropolitan district.

There is no dealer system here, but commission leases are given to retailers of furniture, floor coverings, radios, and to department stores. The installation and servicing is done by the main office.

There are six factory branches of Kelvinator, located as follows:

Livingston St., Brooklyn.
Flatbush Ave., Brooklyn.
Bayridge, Brooklyn.
White Plains.
Bronx, East Kingsbridge Road.
Hillside Ave., Jamaica.

Besides the Kelvinator, the New York showroom organization works with the Leonard, McCray, Gibson and Seeger cabinet companies, installing electric units in them when desired.

Direct-by-mail advertising is extensively done by Kelvinator in New York directly from the main office. This consists of product circulars and bulletins, which give interesting information to home makers about refrigeration and cooking.

One of the most successful Kelvinator dealers in the metropolitan territory is the Public Service Company of New Jersey. Its territory is divided up into six districts, and in each of them an aggressive sales campaign is carried on. A permanent demonstration-exhibit is established in the Newark showroom, under the direction of Miss Ada Swann, home economics expert. The work here is said to have been very fruitful in sales, and, being done in conjunction with the demonstration of many other electrical appliances for the home, very economical in operation.

The New York Kelvinator office reports that the apartment house business in their Manhattan, Brooklyn and Bronx territories is increasing very rapidly, not only in the newly constructed apartments, but in the older ones, where the owners and superintendents are finding it necessary to install electric refrigeration in order to keep their apartments rented in competition with the newer buildings. The apartment house business is usually greatest, from a wholesale point of view, during the two months before the normal renting seasons in New York—May first and October first. Their domestic business in general, which used to be largest in the spring, has held up very steadily all through the summer this year, and has far exceeded their expectations.

FRIGIDAIRE

The distribution of Frigidaires in New York and vicinity is controlled by the Domestic Electric Co., Inc., of 39 West 45th St. Winston Paul is president. The Greater New York territory, which this company controls, is the largest Frigidaire distributorship in the country, and includes all of New York and its boroughs, part of Connecticut, and part of New Jersey. In metropolitan areas the Domestic Electric Company has sixteen branch showrooms and offices, while outside of New York dealers appointed by it handle Frigidaire. Salesmen operating directly out of these showrooms and offices sell to the consumer. Following is listed the Frigidaire metropolitan sales set-up exclusive of dealer operations:

Main showroom and general offices—
39 West 45th St., New York City.

Branches—
2106 Grand Concourse, Bronx, N. Y.
282 Livingston St., Brooklyn, N. Y.
16 Lafayette Ave., Brooklyn, N. Y.
8602 Fourth Ave., Brooklyn, N. Y.
1102 Flatbush Ave., Brooklyn, N. Y.
165-21 Hillside Ave., Jamaica, Long Island, N. Y.
130 Broadway, Flushing, Long Island, N. Y.
8 North 3rd Ave., Mt. Vernon, N. Y.
391 Main St., New Rochelle, N. Y.
21 Mamaroneck Ave., White Plains, N. Y.
248 South Broadway, Yonkers, N. Y.
61 Washington St., Newark, N. J.
598 Central Ave., East Orange, N. J.
61 South St., Morristown, N. J.
42 Valley Road, Montclair, N. J.
Electric Building, Asbury Park, N. J.

FRIGIDAIRE DELIVERY STATIONS

21 East Sidney Ave., Mt. Vernon, N. Y.
385 Gerard Ave., Bronx, N. Y.
524 West 19th St., New York City.
916 Bergen St., Brooklyn, N. Y.
130 Broadway, Flushing, N. Y.
34 Essex St., Newark, N. J.
Calkins Warehouse, Long Branch, N. J.

The Domestic Electric Co., Inc., believes in carefully selecting their salesmen and then training them in a sales course which they conduct. During the school the new salesmen attend lectures and demonstrations. The whole story of Frigidaire is carefully put before them, as well as the story of food preservation necessities and best methods to sell to the consumer.

Additional features of Frigidaire's promotional work help the salesmen in the field. Considerable local as well as national advertising is done. A local home economics department for the purpose of helping the housewife with her household problems assists the salesman greatly in his contacts.

ELECTROLUX

Electrolux, the gas refrigerator, is the product of Servel, Inc., which maintains general offices and show rooms at 51 E. 42nd Street, New York City. H. W. Foulds is vice-president in charge of sales, and B. O. Brown, sales supervisor of the New York territory. Distribution in the metropolitan area of New York is in the hands of the various gas utility companies, and franchises have also been given by some of the gas companies to a number of independent concerns, principally the more important plumbing contractors. Electrolux is also on sale at various department stores in Brooklyn, including Abraham & Straus, Loeser's and Namm's.

Each of the gas companies maintains its own installation staff, which also provides any necessary service without charge to the consumer. Sales and technical schools are maintained by Servel, Inc., at its plant in Evansville, Ind., for the benefit of its own and distributors' staffs.

A vigorous newspaper advertising campaign is part of the general sales effort in the metropolitan area. This advertising is on a co-operative basis, the various distributors sharing its cost with Servel Sales, Inc., on a quota basis.

While the Electrolux was placed on the market only two years ago, its success has been so rapid that it is now contending for leadership in and around New York. The company reports that while this year's quota was three times the quota for 1928, it had been exceeded in the metropolitan area before the end of July. The Consolidated Gas Company, whose operations are chiefly in Manhattan and the Bronx, reports that October was its best month to date.

Electrolux is securing a large share of the apartment house business, and the Servel company reports that during the first nine months of this year contracts were placed for complete installations in 265 apartment buildings in the metropolitan area.

Not including the independent dealers, of which there are about 100, Electrolux distribution is handled by the following companies who maintain their own sales forces:

The Bronx Gas & Electric Co., 43 Westchester Square, New York City.
Consolidated Gas Co., 4 Irving Place, New York City.
New Amsterdam Gas Co., 132 E. 15th St., New York City.
Brooklyn Borough Gas Co., Mermaid Ave. and West 17th St., New York City.
Northern Union Gas Co., 310 East Kingsbridge Road, New York City.
Standard Gas Light Co., 32 West 125th St., New York City.
The Brooklyn Union Gas Co., 2950 Atlantic Ave., Brooklyn, N. Y.
Kings County Lighting Co., 6740 4th Ave., Brooklyn, N. Y.
New York & Queens Gas Co., 114 Amity Street, Flushing, L. I., N. Y.
Northern Westchester Lighting Co., 125 Main Street, Ossining, N. Y.
Central Union Gas Company, 525 Courtland Ave., Bronx, New York City.
East River Gas Co., 35-20 Broadway, Long Island City, N. Y.
New York and Richmond Gas Co., 691 Bay Street, Staten Island, N. Y.
Public Service Electric & Gas Co., 80 Park Place, Newark, N. J.
Westchester Lighting Co., 9 South First Ave., Mount Vernon, N. Y.
Peekskill Lighting & Railroad Co., 1020 Main Street, Peekskill, N. Y.

COPELAND

New York headquarters of the Copeland Refrigeration Co. are in the Grand Central Palace Building at 480 Lexington Avenue. Here are centered the sales activities for both domestic and commercial installations of Copeland refrigerators in the New York area, which includes New York City, Long Island, the counties of Westchester, Orange and Rockland in New York State, a small part of Connecticut, and northern New Jersey.

Sales are divided into three departments:

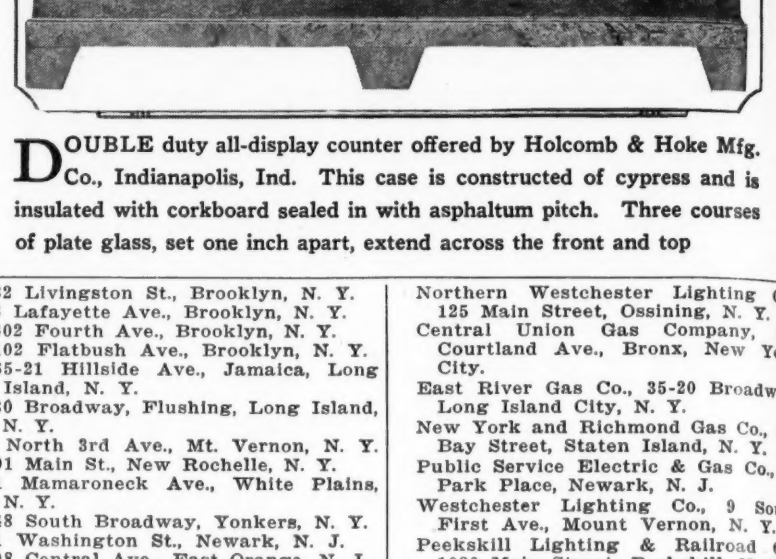
Apartment House, under F. S. Cozzens, Jr.; Commercial, under A. Rosmarin; Dealer, under J. A. Ferrell.

Apartment house business this year has been extremely good, and the October peak of business has substantially exceeded that of May, resulting in record sales.

Dealerships are subdivided into direct sales accounts (with installations and service from the main office) and service dealers, who sell, install and service. Among the sales dealers in New York City, Copeland is displayed and sold by the following:

C. J. Benedict, Warwick, N. Y.
Coutts Electric Co., Perth Amboy, N. J.
C. E. Craven, Norwalk, Conn.
George F. Dege, Patchogue, L. I.
H. J. Hargreaves, Plainfield, N. J.
Industrial Sales Engineering Co., Newark, N. J.
Samuel Mulwitz & Sons, Port Chester, N. Y.
Nelson Park Service, Inc., Ossining, N. Y.
Harry Page, Paterson, N. J.
W. E. Peterman, Flemington, N. J.
Robert W. Plyer, Inc., Hempstead, L. I.
Voorhees, Morristown, N. J.
Wurtz & Fuchs, Hackensack, N. J.
New York Edison Company in the following offices:
10 Irving Place.
270 Canal Street.
124 W. 42nd Street.
20 Norfolk Street.
236 W. 72nd Street.
151 E. 86th Street.
15 East 125th Street.
362 E. 149th Street.
555 E. Tremont Avenue.
310 E. Kingsbridge Road.
Ajax Household Utilities Corp., 2259 White Plains Road, New York City.
Peter Ewald, 2999 Third Ave., New York City.
Hill Refrigerator Co., 620 Atlantic Ave., Brooklyn, N. Y.
Spector Refrigerator Co., Inc., 13 Lafayette Ave., Brooklyn, N. Y.
Giffords, Inc., 118 Northern Blvd., Flushing, L. I., N. Y.
A. DiBlasi, 37-22 103rd St., Corona, L. I., N. Y.
Philip Hartenstein, 73-11 Blvd., Arverne, L. I., N. Y.
Sub-dealers at Rockville Centre, Port Washington, Cedarhurst, and Freeport, L. I., N. Y.
Bavier Company, Inc., New Rochelle, N. Y.
Rao Engineering Co., Mt. Kisco, N. Y.; White Plains, N. Y.
H. E. Johnson, 107 Main St., Nyack, New York.
Sub-dealers at Spring Valley and Suffern, N. Y.
Sub-dealer at Chester, N. Y.
Hanford & Horton, 6-8 North St., Middletown, N. Y.
F. S. Nicholson, Port Jervis, N. Y.
John Schoonmaker & Son, Inc., Main St., Beacon, N. Y.; 94-106 Water St., Newburgh, N. Y.
Frank T. Burke, 50 Throckmorton St., Freehold, N. J.
Sub-dealer at Manasquan, Spring Lake, N. J.
R. C. Johnson, Hackettstown, N. J.
Sub-dealers at Elizabeth, Orange, Bloomfield, N. J.
Montgomery Engineering Co., Jersey City, N. J.
Sub-dealers at Guttenberg, Hoboken, Rutherford, Hackensack, N. J.
New Jersey Zinc Co., Franklin, N. J.
John Panaroni, 440 West End Ave., Long Branch, N. J.
Sub-dealer at Stockton, N. J.
Spad Stores, New Brunswick, N. J.; Somerville, N. J.
Sub-dealers at Neshanik Station, N. J.
Paul C. Taylor, Ninth Ave. and F. St., Belmar, N. J.

Counter Provides Large Display Space



DOUBLE duty all-display counter offered by Holcomb & Hoke Mfg. Co., Indianapolis, Ind. This case is constructed of cypress and is insulated with corkboard sealed in with asphaltum pitch. Three courses of plate glass, set one inch apart, extend across the front and top

PACKERS AROUSED BY POSSIBILITES OF QUICK FREEZING

Plans to Turn Packinghouse Into Meat Factory at Nominal Expense Would Result in Enormous Savings

From The National Provisioner, November 16, 1929.

"Quick freezing has leaped into the very front of the picture of food conservation and elimination of waste in distribution.

"It applies to and may solve major problems in all perishable food fields.

"But its possibilities for the meat industry are nothing short of revolutionary.

"These possibilities are so startling that meat merchandisers—and those who serve them—can't see the picture, even yet.

"*Packers, machinery and supply men have been caught 'flat-footed' by this sudden development. Most of them are running around in circles looking for a way out!*

"Theories are shaping up in the direction of practice, however. The bogie of cost and the scare-crow of impracticability are not as fearful as they were even a short while ago.

"It is encouraging to be told that millions can be saved in shrinkage and better utilization of by-products by the new 'factory methods' by which retail cuts are produced at the packing house.

"But it is difficult at first to credit the assertion made by engineers that *it can be done with no more buildings, ice machines, boiler capacity or electric generators than are used at present.*

"It is declared to be purely an engineering problem in adapting present equipment to new needs, and at a relatively insignificant outlay.

"These points are developed in the following discussion by an engineering member of the editorial staff of *The National Provisioner*. Methods and illustrations will be treated in more detail, with the aid of leading refrigeration experts, in later articles.

Quick Freezing Retail Cuts

"The public is listening with intense interest to the account of what seems to engineers and scientists a simple story of one of the most amazing developments in these days of breath-taking changes. It is a development destined to add to the wealth of the world —not through greater production of goods, but through conservation; that is, through greater utilization of the same production.

"Nature has blessed this land, but we have been careless and wasteful of her bounty. Witness the fruit crops left to decay in the orchards, potatoes left to rot in the ground, etc., because in times of plenty prices to producers fall to a point which will not justify the expense of harvest.

"Gluts of perishable foods, in the hasty and futile efforts to market the excess supply before spoilage, are all too common.

A Preventive of Gluts and Waste

"This new development seems to offer a regulator or governor, whereby all perishable foods may be preserved when they are abundant and subsequently distributed in an orderly manner, thereby lowering the cost of food—one of the large items in the family budget for necessities.

"It promises to stabilize prices and leave the family with more money for luxuries, or more time for leisure—one of the requisites for creative effort.

"We have heard of it from those who have devoted their talents to the perfection of methods and apparatus for working it—from the more important figures in the group such as Birdseye, Bloom, Coke, the Kolbe brothers, Peterson, Taylor—and the dean of them all, Zarotschenzeff. These men will go down in history as great public servants, to whom tribute will be paid increasingly as the far-reaching benefits of their contribution to civilization become known.

Development of Quick Freezing

"The industry and the public are also indebted to such eminent foreign scientists as Dr. R. Plank, professor of the Technical University, Karlsruhe, Germany, and director of the German Institute of Refrigeration; E. Kallert, of Hamburg, Germany; Professors Uberto Ferretti, of Rome, Italy, and Wilson, of London, all of whom have done a great deal of scientific research on the freezing of comestibles, the results of which form the foundations upon which the structure representing these new inventions is being reared.

"The history of the development of quick-freezing has been told in a clear, concise way in the U. S. Bureau of Fisheries Document No. 1016, entitled 'Refrigeration of Fish,' by Harden F. Taylor, a generous contributor to the pioneering work in the field of quick-freezing.

"These are important times in the meat-packing industry and the fish industry; and, indeed, for everyone connected with the production, preparation, marketing and consumption of perishable foods—and that means everybody. The development of quick-freezing arms meat packers, fisheries, fruit and vegetable growers of the world with an instrumentality which promises to lift them out of the hazardous position they have always occupied, and put them on a practically even footing with producers and manufacturers of non-perishable goods.

Where the Meat Packer Stands

"The product of the packers is highly perishable—not imperishable. Furthermore, the meat packer stands as a buffer between the livestock producer and the meat consumer, trying to keep both contented, all the while trying to keep an ample, regular flow of livestock to his plant, endeavoring to maintain a high food factor at prices which will adequately compensate the growers, and to keep an equally regular flow of meat and meat products to the consumer at prices which the consumer will be willing to pay, and still yield the packer a margin for his services.

"This is a difficult position. The inadequacy of the return for the packer's effort and upon his capital investment is well known.

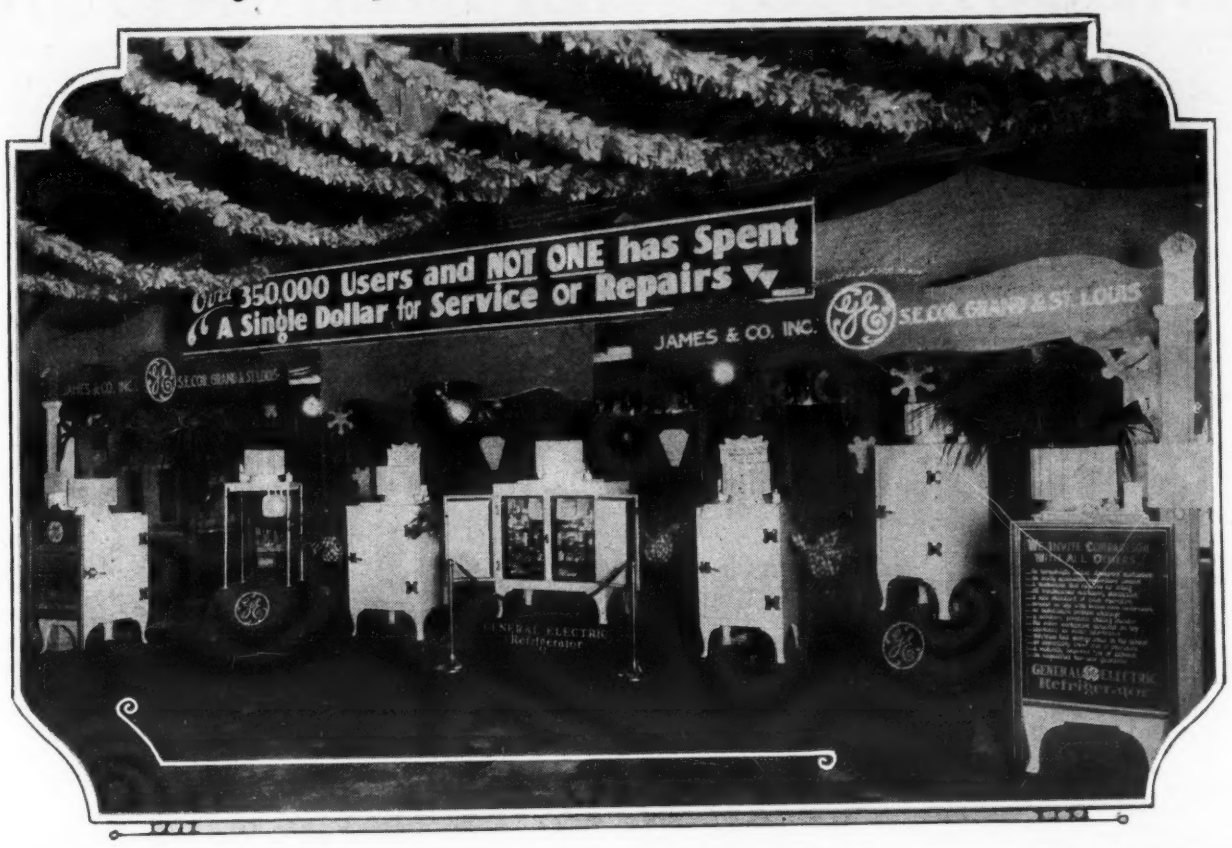
"Whenever a manufacturer must take, at a fair price, for reasons of public and business policy, all of a valuable, perishable raw material offered to his plant, and must sell the goods at whatever prices are necessary to move them into channels of consumption before they spoil, he is in an extremely hazardous position.

"That is exactly the status of the meat packers. They have tried to minimize this hazard in a variety of ways, none of which has given them the control of their business which they require and should have.

"What they need is something which will enable them to add their operating expense and a fair profit onto their costs, and then feed their goods to the market as needed.

"Think for a moment what a useful instrument has been forged for the meat packer by this almost incredible development; and its utility in achieving the control of the business which it promises."

Many Prospects Secured at Booster's Show


Over 350,000 Users and NOT ONE has Spent A Single Dollar for Service or Repairs
JAMES & CO. INC.
S.E. COR. GRAND & ST. LOUIS
GENERAL ELECTRIC Refrigerator

ENTICING edibles in a large General Electric refrigerator with glass doors appealed to crowds that thronged the North St. Louis Boosters' Show, November 5-11. E. A. Sander, sales manager of the North St. Louis store of James & Co., Inc., distributors, arranged the exhibit and found it necessary to place a railing in front of the open model to keep the crowd from pressing against the doors. W. L. Burton, of James & Co., reports that slightly better than 15 per cent of the business in the North Side store originated from prospects obtained from a similar display at this show in 1928.

DISPLAY JARS HELP FROZEN FOOD SALES IN RETAIL STORES

CHAIN store merchandising methods and the development of processes by which the thermos principle of insulation can be applied to larger and more useful containers, according to the American Thermos Bottle Co., Norwich, Conn., have led to the introduction of Thermos refrigerated jars and cabinets into stores retailing frozen food products. These new containers are small and can be conveniently placed to display a product in easy reach of the customer's hand, which is the theory of chain store selling that has greatly assisted sales.

Thermos containers are made in the form of counter jars, reserve jars, display cabinets and liquid dispensers. They are refrigerated with solid carbon dioxide, varied amounts being required to cool the contents of each container. In a five-gallon display jar the refrigerating action will extend over a period of 24 hours with one and a half to two pounds of solid carbon dioxide.

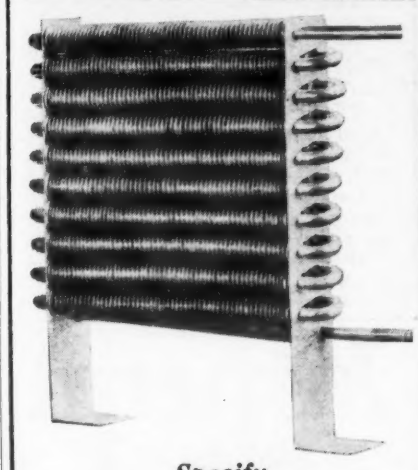
These various forms of containers take up very little display space in retail stores. They can be placed on either counter or floor, or can be used as an independent vending unit. On the outside of the container a description of the product or products therein, with illustrations, can be used to arouse the buyer's interest in the foodstuffs. In this way frozen food products ordinarily kept out of sight behind the counter can be displayed.

These containers can be used to supplement electric refrigeration. In large establishments, products which are kept in large refrigerators or coolers can be displayed in small jars or cabinets. The supplementary units can be replenished from supplies kept in the electric cabinet.

In small stores, where the volume of frozen product sales are low, or for temporary activities at fairs, carnivals, etc., these refrigerated containers are most adaptable.

DRINKING WATER FAUCETS
for
Refrigerators — Water Coolers
New model now available for use on city water pressure

CORDLEY & HAYES
1 Leonard St. New York City



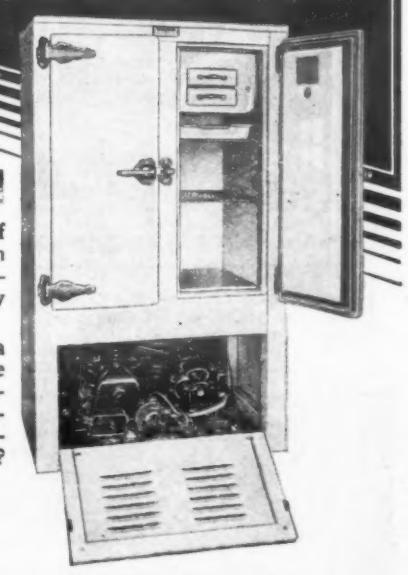
Specify
ROME CONDENSERS
Made of heavy gauge deoxidized seamless copper tube. One piece construction.
Designs for all requirements.
Rome-Turney Radiator Co.
ROME, N. Y.

The BEST and BIGGEST Line for the BIGGEST Commercial Field in America
A complete variety of super-improved equipment for the great Ice Cream and Soft Drink trade, ICE-CREAM CABINETS, SODA FOUNTAINS, RESTAURANT COOLERS, BOTTLE COOLERS, Etc., for use with ALL types of Refrigerating units. *Write for catalogue and prices—state type of machine you make or handle.*
AURORA METAL CABINET WORKS, INC., Aurora, Ill.

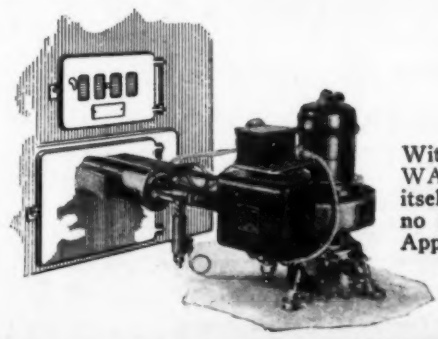
precision built
Motor, Transmission, Eccentric *and* Crank Shafts
Made to your specifications.
Send us your blue prints—
We will send you our prices.

MODERN MACHINE WORKS, INC.
196 Milwaukee St. MILWAUKEE, WIS.

Wayne
ELECTRIC REFRIGERATOR

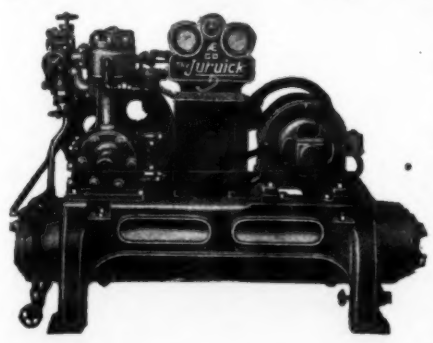


Double Your
Sales--and Profits!
To the new, complete, colorful line of Wayne Electric Refrigerators has been added the separate refrigerating units—(Two sizes)—that can be installed in any refrigerator!
This means that every home is now a REAL PROSPECT! That wherever the housewife prefers to retain her own refrigerator—the Wayne electric refrigerating unit can be easily and quickly installed! Want to know more about it? Just drop us a line!

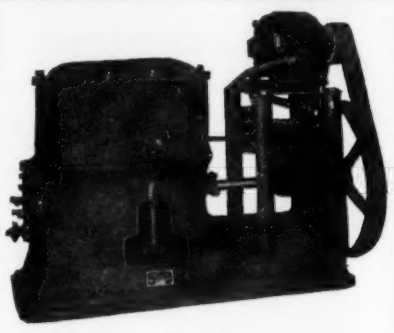


Oil Burners, Too!
With only one moving shaft, the New WAYNE OIL BURNER is in a class by itself! No carburetor, cams, floats, and no part of burner in or under fire box. Approved by National Fire Underwriters! Quick and Easy to install! Big profits for responsible dealers!
WAYNE HOME EQUIPMENT CO.
Fort Wayne, Indiana

JURUICK REFRIGERATION



There is a type for EVERY need
A complete line of JURUICK AUTOMATIC units and AMMONIA COMPRESSORS of one-quarter ton to 40 tons refrigerating capacity provides economical service on big or little refrigeration jobs.
JURUICK insures smooth, silent performance, has automatic control, is easy to operate. It costs little to install and is easy for dealers to sell.
AMERICAN ENGINEERING COMPANY
2420 Aramingo Avenue, PHILADELPHIA, PA.



Electric Refrigeration Distributors and Dealers

You need the PEERLESS line of compressors.

PEERLESS units give you a COMPLETE line, ranging from one to ten tons.

PEERLESS Perfected Multiple Apartment System is recognized leader in its field. Full details given on request. Our record warrants your most exacting investigation.

PEERLESS ICE MACHINE CO.
515 W. 35th St.
CHICAGO, ILLINOIS

Mineral Wool

Low in Thermal Conductivity and Low in Cost

The exceptionally low thermal conductivity of Mineral Wool (6.3 B.T.U.) as determined by the U. S. Bureau of Standards, stamps it as the ideal insulating material for

Cold Storage Construction

It assures perfect insulation and maximum efficiency at a low cost.

Mineral Wool is entirely mineral, indestructible, vermin-proof and easy to apply.

Sample and descriptive folder upon request.

U.S. MINERAL WOOL CO.
280 Madison Avenue, New York
Western Connection: Columbia Mineral Wool Co., South Milwaukee, Wisconsin

This is a National Message to the American Housewife

Get the most out of your ELECTRIC, GAS *or* ICE *Refrigerator*

Send $1.00 for the two big 50c rolls (West of Missouri and South Coast States 60c per roll, both for $1.20 postpaid).
FREE: When ordering mention this ad for a Miracle Paper Dish Rag and interesting samples for You and Your Friends.

Your refrigerator will serve exactly and according to intelligent use and operation, and your palatable, health building foods will speak for themselves when served.

Are you using both KVP Refrigerator Papers? Try the famous pair—Heavy Waxed Paper in "Cutter Box"—it seals tight (one sheet will do) keeps the moisture in or keeps the moisture out as desired. However, remember all foods should not be wrapped in Waxed Paper—for 100% results you also need KVP Household Parchment, the waterproof paper for cooking and for wrapping all moist, greasy and wet foods—a cheesecloth substitute (you can boil it) like a rag when wet—use it again and again—it wears.

Try your Grocer, Stationer, Hardware, Department Store and Naborhood Merchant first; if they cannot serve you KVP will pay the parcel post.

KVP STANDS FOR "THE WORLD'S MODEL PAPER MILL"
KALAMAZOO VEGETABLE PARCHMENT CO.
KALAMAZOO MICHIGAN U.S.A.
MANUFACTURING WORLD-WIDE FAMOUS FOOD PROTECTION PAPERS

IF you are in any way interested in Electric or Gas Refrigeration ... read the above over twice because it will mean much to you. .. this is our National message to the American Housewife in cooperation with your refrigerator sales campaigns. Write for samples and advertising ideas that sell your refrigerators to new customers and keep old customers interested

M.&W.Co 1876 **LACQUERS ENAMELS**

A Lacquer Finish that Has Stood the Test

M & W REFRIGERATOR LACQUER ENAMELS

A Quality Reputation on these products has been established through actual large quantity production on Cabinets widely distributed throughout the world. Another complete M & W Finish including either Lacquer or Oil Primer followed by M & W Lacquer Enamel in White or Colors.

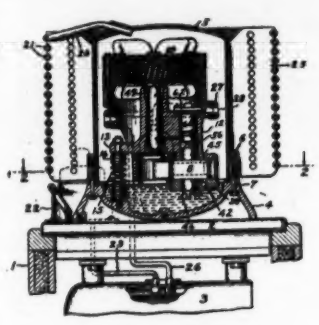
We invite your correspondence regarding your particular problems.

MAAS & WALDSTEIN CO.
Executive Offices and Plant, 438 Riverside Avenue
NEWARK, N. J.

Chicago Office and Warehouse
1115 Washington Blvd. West

Los Angeles Office and Warehouse
1214 Venice Blvd., Los Angeles, Calif.

RECORD OF REFRIGERATION PATENTS



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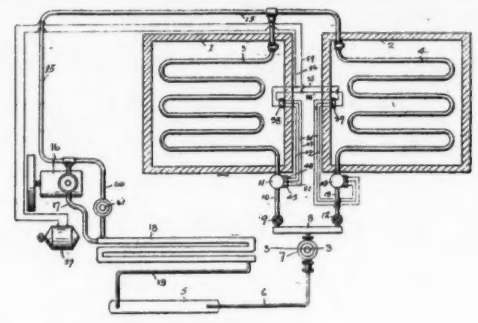

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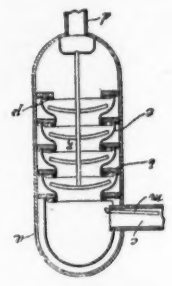

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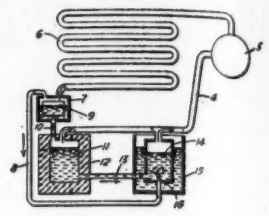

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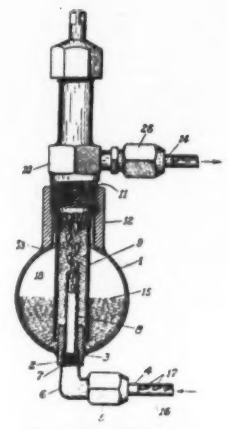

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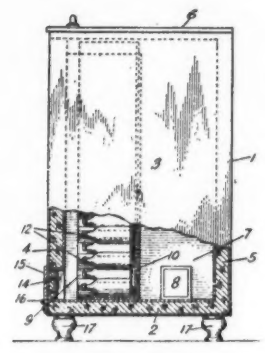

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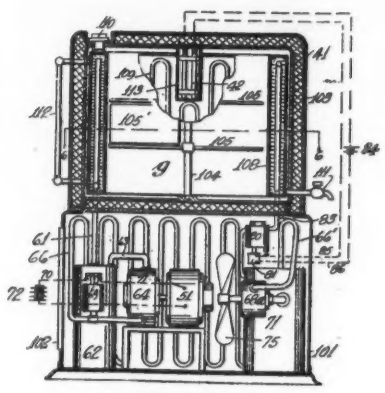

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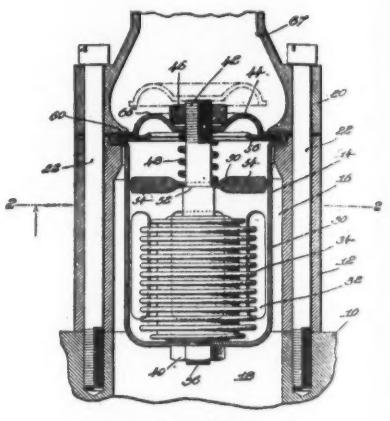


1,734,963

ISSUED NOVEMBER 12

1,734,963 — THERMOSTATIC CONTROL OF COOLING CIRCULATION. Walter B. Clifford, Cambridge, Mass., assignor to Clifford Manufacturing Co., Boston, Mass., a Corporation of Delaware. Filed Nov. 24, 1926. Serial No. 150,581. 2 Claims. (Cl. 236—34.)

1. Temperature-controlled apparatus comprising metallic bellows, an open cage connected with the bellows at one end, a valve opening formed in the cage, a valve connected with the opposite end of the bellows and co-operating with the opening, the valve being shaped and designed in conjunction with the valve opening to reverse the direction of flow of water therebeneath upon opening in a manner to cause the exertion of a substantial reaction head in a direction to open the valve.

1,735,082—REFRIGERATED PACKAGE AND METHOD. James W. Martin, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1927, Serial No. 180,411. Renewed Apr. 12, 1929. 17 Claims. (Cl. 62—92.)

1. A refrigerated package including a perishable product adapted to be overfrozen, a metal container enclosing said product, frozen carbon dioxide in contact with the metal of the container, a paper bag in which said container and frozen carbon dioxide are enclosed, with the latter nearest the mouth of the bag, a corrugated pasteboard carton enclosing said paper bag, and false walls between said bag and said carton affording interspaces for up-circulation of gas escaping from the paper bag, said metal container being circular in cross-section and said carton being rectangular.

1,735,094—METHOD AND MEANS FOR MAKING CARBON DIOXIDE SNOW. Thomas B. Slate, Glendale, Calif. Filed Oct. 23, 1925, Serial No. 64,478. Renewed Apr. 13, 1929. 4 Claims. (Cl. 62—121.)

1. In the art of making carbon dioxide snow, the method which includes supplying liquid carbon dioxide under sufficient follow-up pressure and at low enough temperature to insure the liquid state and permitting sudden jet expansion of said liquid approximately to atmospheric pressure so as to yield snow and cold gas; and, as an intermediate step, cooling the liquid prior to such expansion, to lower its temperature without corresponding decrease of pressure, thereby to increase the yield of snow.

1,735,098—ICE CARRIER. Walter C. Wight, Dallas, Tex. Filed Apr. 11, 1927. Serial No. 182,670. 1 Claim. (Cl. 224—29.)

1,735,170—WORKING FLUID FOR REFRIGERATION. Andrew A. Kucher, Chester, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 11, 1926. Serial No. 128,656. 11 Claims. (Cl. 252—5.)

2. A working fluid for a refrigerating machine which consists of castor oil and sulphur dioxide forming with the castor oil a physical solution or homogeneous mixture in substantially all proportions.

11. The method of lubricating a closed-cycle refrigerating machine which consists in alternately compressing, condensing and expanding sulphur dioxide having intimately mixed therewith particles of castor oil.

1,735,453—HOUSEHOLD REFRIGERATOR. Harry W. Dyer, New York, N. Y. Filed May 14, 1924. Serial No. 713,144. 4 Claims. (Cl. 62—98.)

1. In a refrigerating apparatus, the combination of a cooling chamber, a refrigerating coil associated with said chamber, a pressure coil, means for delivering air under pressure to said pressure coil, a receiver tank connected through an expanding motor with said pressure coil and means controlled by temperature changes in said cooling chamber for connecting said receiver tank with said refrigerating coil.

1,735,454—REFRIGERATING APPARATUS. Harry W. Dyer, New York, N. Y. Filed Mar. 26, 1926. Serial No. 97,790. 9 Claims. (Cl. 62—98.)

1. In a portable refrigerator and filter, the combination of a liquid receptacle, a cooling chamber below said receptacle, an inverted hollow filter element interposed between said receptacle and said chamber, a refrigerator coil for cooling said chamber, a mechanism for forcing a refrigerant through said coil, a motor for operating said mechanism and means operated by said motor for maintaining an air pressure in said receptacle.

1,735,487—ABSORPTION MACHINE. Edmund Altenkirch, Alt-Landsberg-Sud, Germany, assigner to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Oct. 17, 1927. Serial No. 266,767, and in Germany Aug. 12, 1926. 5 Claims. (Cl. 62—119.5.)

1. In an absorption machine, a circulatory system comprising an absorber, an evaporator located at a lower level than the absorber, and conduit means connecting said absorber and evaporator, said system containing an absorbable gas and a non-absorbable gas of higher specific gravity than said absorbable gas.

1,735,495—REFRIGERATING COUNTER. French E. Dennison, Beloit, Wis., assignor to National Refrigeration Corporation, Beloit, Wis., a Corporation of Delaware. Filed Dec. 10, 1926. Serial No. 153,751. 12 Claims. (Cl. 62—37.)

1,735,498—REFRIGERATING APPARATUS. Joseph M. Etienne, San Francisco, Calif. Filed Dec. 20, 1926. Serial No. 156,015. 7 Claims. (Cl. 62—4.)

1. A refrigerating apparatus comprised of a plurality of compartments to be cooled; a coil in each compartment; a refrigerant compressor; a high pressure refrigerant line leading from the compressor to each compartment coil to circulate refrigerant thereto; a low pressure refrigerant line leading from each compartment coil to the compressor to return refrigerant thereto; a temperature responsive device in each compartment; means operable by each temperature responsive device to automatically regulate the volume of refrigerant that passes from the high pressure line into each coil to maintain the temperature in the respective compartments above a selected minimum temperature and to connect or disconnect the individual compartment coils to the high pressure line as the temperature in the different compartments rises or falls below the selected low temperature; and means operable by each temperature responsive device to stop the compressor motor when the temperature in all compartments falls below the selected temperature, a by-pass connecting discharge and intake sides of the compressor; and means in said by-pass responsive to the pressure on the discharge side of the compressor for permitting the passage of refrigerant from the discharge side of the compressor to the intake side thereof, to maintain the volume of refrigerant to the compressor substantially constant.

1,735,611 — APPARATUS FOR CONDITIONING AIR. Louis Helmer, New York, N. Y. Filed Jan. 31, 1929. Serial No. 336,383. 2 Claims. (Cl. 261—118.)

1,735,642—REFRIGERATOR SHOW CASE. Meyer Greenburg, Philadelphia, Pa., assigner to National Refrigerator Co., Philadelphia, Pa. Filed Sept. 30, 1927. Serial No. 223,038. 6 Claims. (Cl. 62—37.)

1. A refrigerator case including end and intermediate refrigerating elements, a goods support between the end refrigerating elements, apertured partitions to direct circulation of cooled air through the end portions of the goods support in longitudinally extending paths, and means defining spaced paths at the forward side of the intermediate refrigerating element to direct circulation of cooled air through the intermediate portion of the goods support in a transversely extending path.

1,735,724—REFRIGERATION. John G. Bergdoll, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Feb. 7, 1928. Serial No. 252,493. 5 Claims. (Cl. 62—2.)

1. The combination of a cooler; a connection for supplying a cooling liquid thereto; a discharge connection leading therefrom; a connection for supplying a liquid displacing gas to said cooler; means for opening either the discharge connection or the displacing gas connection, while maintaining the other closed; a chamber having means for yieldingly resisting the entrance of liquid; means for resisting back flow through said supply connection; and a connection from the lower portion of the cooler to said chamber.

1,735,832—REFRIGERATED PACKAGE WITH PERMEABLE INSULATION AND METHOD. James W. Martin, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 0, 1927. Serial No. 180,410. Renewed Apr. 12, 1929. 16 Claims. (Cl. 62—92.)

1. A refrigerated package including a perishable product adapted to be overfrozen, a container enclosing said product, solidified carbon dioxide and a bag in which said container and frozen carbon dioxide are enclosed, with the latter nearest the mouth of the bag, the material of the bag including a thickness of insulating material of loose fibrous quality affording interspaces designed to permit transverse oozing through of gas liberated within the bag.

ISSUED NOVEMBER 19

1,735,869—REFRIGERATION. Donald B. Knight, Brooklyn, N. Y. Filed Jan. 26, 1927. Serial No. 163,635. 6 Claims. (Cl. 62—179.)

1. The process of refrigeration by the solution of a salt in a solvent, which consists in concentrating a salt solution, crystallizing the salt out of the solution, dissolving the salt in the solvent, returning the solution for concentration, and maintaining a balance of weight between the column of concentrated solution and the column of concentrated solution and the column of returning solution, movement of the solutions in the two columns being dependent upon the difference in specific gravities of the two solutions.

3. A refrigerating apparatus of the character described, comprising a refrigerating device in which the cold solution is received for the absorption of heat, a concentrator, a crystallizer and dissolver to receive an immiscible cooling medium and in which the salt is crystallized out of the solution by reduction in temperature and is received in the dissolver for further solution, means including a dropper to deliver the concentrated solution from the concentrator to the crystallizer in drops, and means to return the solution from the dissolver to the concentrator, the crystallizer and dissolver being arranged as a vertically disposed vessel with an air chamber at the top and a trap being interposed in the connection between the concentrator and the dropper to prevent the escape of air from the air space.

1,735,995 — REFRIGERATING SYSTEM. Ransom W. Davenport, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 29, 1927. Serial No. 236,428. 12 Claims. (Cl. 62—178.)

1. A refrigerating process utilizing as a working medium an evaporable liquid and a gas substantially inert to and insoluble in said liquid comprising withdrawing gas and the vapor of the liquid from above a body of the liquid, extracting heat from the gas-vapor mixture to condense the vapor, feeding the residual vapor-gas mixture and the warm condensate toward the body of vaporizing liquid, separating the gas-vapor from the condensate, cooling the condensate by evaporating it under reduced pressure of its own vapor only and substantially without access of heat from surroundings, feeding the cooled condensate to the body of liquid, expanding the vapor-gas mixture into said body while reducing the pressure above said body, and continuously repeating the above steps.

1,736,057 — REFRIGERATED BOTTLE DISPENSER. Aden E. Smith, Columbus, Ohio, assignor to The D. A. Ebinger Sanitary Mfg. Co., Columbus, Ohio, a Corporation of Ohio. Filed No. 11, 1927. Serial No. 232,684. 5 Claims. (Cl. 312—36.)

1. A bottle dispenser comprising a casing formed to include heat insulated walls, said casing being formed internally to include a refrigerant receiving chamber and a plurality of bottle receiving compartments, a removable rack positioned within each of said compartments and adapted for the reception of a plurality of horizontally arranged bottles, each of said racks being formed to include a bottle receiving channel of substantially zigzag form wherein adjacent bottles impinge upon one another but do not occupy the same vertical

(Concluded on Page 23, Column 1)

REFRIGERATION PATENTS

(Concluded from Page 22, Column 5)

plane, and means provided in connection with said casing permitting of the removal of bottles from the lower ends of each of said bottle compartments.

1,736,288—REFRIGERATION. Carl Georg Munters, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 7, 1927, Serial No. 159,534, and in Sweden Jan. 8, 1926. 7 Claims. (Cl. 62—119.5.)

1. An evaporator for refrigerating apparatus comprising members forming liquid cooling agent retaining surfaces and relatively dry surfaces, means for conducting a gas through the evaporator in the presence of which the refrigerant evaporates and means for insulating the gas in its passage from the relatively dry surfaces.

1,736,408—AIR COOLER. Stewart E. Lauer, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,607. 2 Claims. (Cl. 183—23.)

1,736,470—REFRIGERATING APPARATUS. Lucien L. Torrey, Los Angeles, Calif. Filed Oct. 11, 1924. Serial No. 743,072. 8 Claims. (Cl. 230—191.)

1. In a refrigerating apparatus, the combination of a tank to receive expanded gases, a motor in said tank, a compressor in said tank to suck the expanded gases from said tank and deliver it under increased pressure to the exterior of said tank, said compressor having a reciprocating piston with a hollow wrist pin, said tank being adapted to contain lubricating oil in its bottom, said motor and compressor being located above the level of the oil supply, an oil pump in said tank to draw oil therefrom, said motor driving said compressor and said pump, and a piping system connecting said pump and motor and the cavity of said wrist pin to supply lubricant to the bearings of the same, whereby only gases at low pressure come into contact with said lubricating oil and whereby splashing of oil in contact with the gases is avoided.

1,736,538—ICE-CUTTING DEVICE. Samuel E. Kurtz, Sac City, Iowa. Filed Apr. 16, 1923. Serial No. 632,273. 7 Claims. (Cl. 262—20.)

1,736,626—MILK COOLER. Louis Rosenfeld, Baltimore, Md., assignor by mesne assignments, to Cherry-Burrell Corporation, a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,325. 1 Claim. (Cl. 257—183.)

A milk cooler comprising two opposed upright hollow headers and a plurality of tubes connected in series by the headers, said cooler having openings for the inlet and outlet of cooling fluid, said headers having flanges at their lower ends projecting toward one another, and a drip pan having outwardly projecting lugs, said flanges having sockets to receive said lugs.

1,736,635—REFRIGERATING MACHINE. Christian Steenstrup, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 5, 1927. Serial No. 166,212. 8 Claims. (Cl. 62—116.)

1. A refrigerating machine comprising a gas tight casing, operating mechanism therein comprising a compressor, means for resiliently mounting the mechanism in spaced relation with the walls of the casing, an evaporator, a pipe connection between the compressor and the evaporator forming a plurality of turns about the mechanism, and means comprising a tie between the turns for damping vibrations thereof.

1,736,648—REFRIGERATING PLANT. Belonie Clavette, Edmundston, New Brunswick, Canada. Filed July 16, 1925. Serial No. 44,022. 1 Claim. (Cl. 62—61.)

1,736,706—REFRIGERATING SYSTEM. Albert Jones, Baltimore, Md., assignor to himself, Maurice K. Heartfield, Washington, D. C., and James M. Decker, Baltimore, Md. Filed Feb. 5, 1927. Serial No. 166,118. 7 Claims. (Cl. 62—92.)

1. In a refrigerating system the combination with a container for carbon dioxide ice in the upper part of said system, a closed extension space below the container in connection with the interior of the container and a nozzle connected with the extension and directing a jet of vaporized gas adjacent to the wall of the container.

1,736,721—MEANS FOR PASSING LUBRICANTS DIRECTLY THROUGH LIQUID RECEIVERS IN REFRIGERATION APPARATUS. Lee V. Myers, Fort Wayne, Ind., assignor, by mesne assignments, to The Wayne Home Equipment Company, Fort Wayne, Ind., a Corporation of Maryland. Filed Nov. 17, 1927. Serial No. 233,939. 4 Claims. (Cl. 62—115.)

1. In a refrigeration system through which lubricant is circulated mixed with refrigerant, a liquid receiver and means connected with said liquid receiver for passing said lubricant directly through said receiver while permitting part of the liquid refrigerant to be deposited therein.

1,736,749—PNEUMATIC CONTROL APPARATUS. Albert Penn, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Dec. 24, 1925. Serial No. 77,483. Renewed Apr. 15, 1929. 1 Claim. (Cl. 137—153.)

Interest Centers in Commercial Models

Commercial refrigerator display in Princess Martha Hotel, St. Petersburg, Fla., at General Electric "Open Winter" sales meeting.

FLORIDA G. E. MEN PLAN COMMERCIAL CAMPAIGN

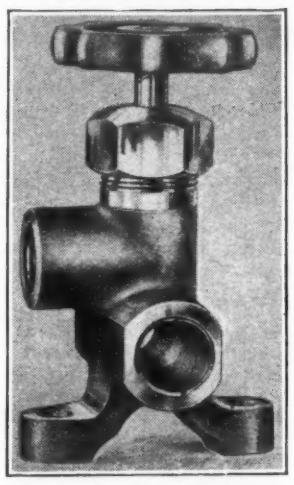
St. Petersburg, Fla.—Approximately 150 Florida dealers and salesmen of General Electric Co., Cleveland, Ohio, met with Florida Electric Refrigeration Co., Nov. 12, for an "Open Winter" sales meeting. Representatives from the Refrigeration Department of General Electric Co. included W. J. Daily, manager of the sales promotion division; W. E. Landmesser, manager of the commercial division; and C. G. Smith, manager of the credit and financial division. Felix Bertran, of General Electric of Cuba, also attended. H. J. Francis, vice-president of General Contract Purchase Corp., New York, and L. W. Driscoll, district representative of General Electric Refrigeration Department, were other out-of-state representatives on the program.

The program opened with a buffet luncheon. The welcome was given by G. S. Patterson, president of Florida Electric Refrigeration Co. "The Measuring Stick of Good Health," featuring Dr. Chris Dantsizen, of General Electric's research laboratory, was produced on a portable photophone. Following this, W. J. Daily spoke on "Melting Winter Sales Resistance with Common Sense." "The Salesman's Salesman," a moving picture showing the effect of advertising and sales promotion material on prospects was then produced. W. E. Landmesser spoke on "A Broad Highway for Big Business," a commercial talk illustrated with stereopticon slides. "A Suite Proposition," another illustrated talk, was then given. A one-act comedy, "Such Crust," portraying lack of salesmanship, was given after a short recess. "Right at Your Finger Tips" was the subject of L. W. Driscoll. This was followed by a motion picture, "A Poker Game of National Proportions," which outlined the national contest now being conducted by General Electric Co. H. J. Francis then explained how installment selling makes it easy for the average home owner to purchase various commodities, the subject being, "Opening the Family Purse Strings." This was followed by another talking movie, showing a typical use of the Sales Presentation book.

C. E. Roesch, formerly assistant to the sales manager of the Refrigeration Department of General Electric Co., Cleveland, now vice-president and director of sales for Florida Electric Refrigeration Co., spoke on "Looking Ahead." In this speech he dealt on the future of refrigeration business in Florida. "From 1927 to ?," a talking moving picture, presenting an interesting forecast of the refrigeration market, by T. K. Quinn, manager of Refrigeration Department, General Electric Co., closed the afternoon program.

Parts of the evening program, which consisted of two speeches by W. J. Daily, music and entertainment, were broadcast from radio station WSUN.

KEROTEST ANNOUNCES NEW MANIFOLD VALVE



Type 405 Three-Way Manifold Valve

Kerotest Mfg. Co., 2525 Liberty Ave., Pittsburgh, Pa., announces a new 3-way manifold valve, Type 405, which has a stem of the back-seating type, packing being employed only to confine the pressures between the completely open and closed positions. This valve is of chrome nickel steel, chromium plated, and has handwheel of forged brass, knobbed to provide a convenient grip for the hand.

When placed in a knock-out box or panel board, the handwheel parallels the wall and is in position for immediate opening or closing. Forged connections are long enough to tap ⅜ inch female pipe thread below the stem and to machine a flare connection directly on the side outlet.

"MONEY MAKER DISPLAY" OFFERED BY EHRLICH

A "Congress" design cooling room and a "Moneymaker," clear-vision display counter are included in the line of commercial refrigeration cabinets made by H. E. Ehrlich & Sons Mfg. Co., Lake and Colorado Aves., St. Joseph, Mo.

The "Congress" cooling room has 6-in. walls, top and bottom. Plate glass in the three retail doors is set against rubber. This walk-in cooler is designed for either ice or mechanical refrigeration. Nickel-plated hardware consists of self-closing hinges and automatic fasteners.

"Moneymaker" No. 1700 is a display counter which can be used with any make of automatic refrigeration. Coils are suspended from top of bunker compartments, which are placed at each end of counter. This case is made in 10, 12 and 14 ft. lengths.

AETNA OFFERS TOP SECTION FOR ICE CREAM CABINETS

Aetna Rubber Co., Ashtabula, Ohio, is now producing "Aetnalite" top hole sections, fitted with cork insulation, for ice cream cabinets. This company also offers the following ice cream cabinet replacement parts: brine hole stoppers, flexible hole sleeves, lid collars, lid knobs and semi-hard hole sleeves.

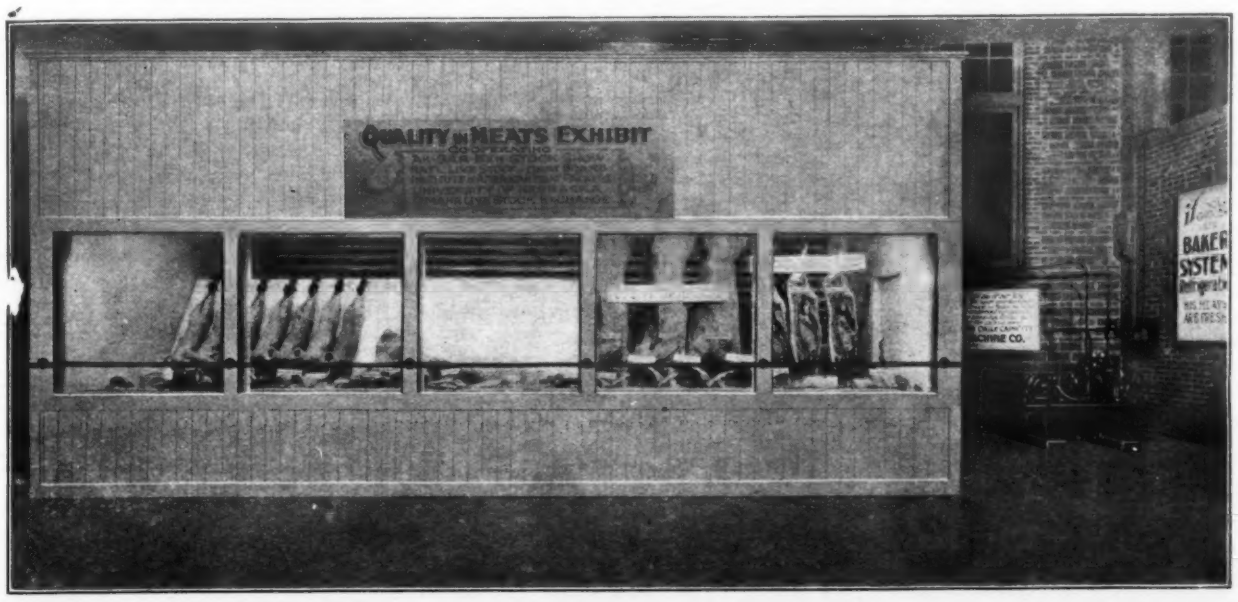
EXTERIOR RECORDER SHOWS CABINET TEMPERATURES

A thermometer that can be inserted through the wall of a refrigerator, thus enabling the user to read the inside temperature from the outside, without opening doors, is manufactured by Standard Thermometer, Inc., 65 Shirley St., Boston, Mass.

AVERAGES SALE A DAY

Colorado Springs, Colo.—Thomas Meservey, a partner in the Lowel-Meservey Hardware Co., Kelvinator dealers, recently sold a Kelvinator every day for a month, leaving his store only on one occasion to make a sale. Seventeen of these sales were of the large domestic models.

Increasing the Demand for Quality Meats



AN interesting exhibit at the second annual Live Stock Show, held under the auspices of Ak-Sar-Ben in Omaha during November, was the "Quality in Meats Exhibit."

The exhibit was made possible through the co-operation of Ak-Sar-Ben, the National Live Stock and Meat Board, the Institute of American Meat Packers, the University of Nebraska, the Omaha Live Stock Exchange and the Baker Ice Machine Company, who furnished the cooling equipment.

The use of lamb and graded beef was featured. Choice and special cuts of meat were included in the display.

BRUNSWICK-KROESCHELL REFRIGERATION

CUSTOM BUILT ELECTRIC REFRIGERATION

for every refrigeration requirement

BRUNSWICK-KROESCHELL COMPANY
Refrigerating & Ice Making Machinery
NEW BRUNSWICK, N.J. - CHICAGO, ILL.

HERE'S AN IDEA!

It's Finish that counts when it comes to selling. Lustrous Ferro Porcelain Enamel will increase sales and the cost will not be high.

May we submit samples?

The Ferro Enamel Supply Company
Cleveland, O.

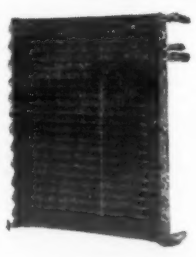
RUBBER PRODUCTS

Engineering experience, laboratory and production facilities for the development and manufacture of hard and soft rubber products for refrigerator cabinets, equipment accessories and insulation parts.

THE AETNA RUBBER CO.
ASHTABULA, OHIO

FLINTLOCK CONDENSERS

Full Capacity



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DETROIT, MICH.

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31ST ST. AND 7TH AVE.
opposite PENNA. R.R. STATION

1200 Rooms each with Bath and Servidor
ERNEST G. KILL
Gen. Mgr.

ROOM AND BATH · 3.00 UP